



FY 2020–2026 U.S. DEPARTMENT OF VETERANS AFFAIRS ENTERPRISE ROADMAP EXECUTIVE SUMMARY

March 31, 2020

December 2020 Release

VA



U.S. Department of Veterans Affairs

Office of Information and Technology

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Purpose – VA Enterprise Roadmap

- The U.S. Department of Veterans Affairs' (VA) information technology (IT) modernization plan that provides visibility into Department's digital transformation journey, where it must go, and how it will get there
- Describes VA's current and future views of its business and technology environment
- Illustrates VA transformative initiatives and IT modernization timelines
- Demonstrates how IT will improve customer experience (CX), care coordination, access to benefits, interoperability, trust in VA, and stewardship of taxpayer dollars
- Informs long-term IT planning, prioritization, budgeting, and decision making across VA
- Addresses oversight concerns that VA lacks an IT modernization plan
- Supports the development of System, Product, and Portfolio Architecture
- Aligns to the Office of Management and Budget (OMB) Memorandum 13-09 and Circular A-11, President's Management Agenda (PMA), VA Priorities, VA Strategic Plan, VA Business Reference Model, Veterans Health Administration (VHA) Health Information Strategic Plan, VA's IT Information Resources Management (IRM) Strategic Plan, Office of Information and Technology (OIT) Digital Transformation Strategy, Joint Business Plans, and OIT Division Operations Plans
- VA's Chief Information Officer (CIO), supported by the Office of Quality, Performance, and Risk (QPR), is responsible for the maturation of VA's Enterprise Roadmap

For more information on near and short-term plans for System, Product, and Portfolio Architecture, refer to VA's Architecture and Engineering Service within the Demand Management Division of the Enterprise Program Management Office.

Structure - VA Enterprise Roadmap Executive Summary

The Executive Summary provides a detailed overview of the content within the Enterprise Roadmap:




- Organized to align with OIT's Development Security Operations (DevSecOps) Product Line Management (PLM) Model
- Depicts the modernization of 25 Product Lines that drive care, benefits, and services within five PLM Portfolios
- QPR will incorporate Data Analytics/Knowledge Management and End User Operations into the Enterprise Roadmap once OIT institutionalizes these Product Lines
- QPR will evolve the Enterprise Roadmap as OIT refines the PLM Model and implements Technology Business Management (TBM)

To provide insight into each Portfolio, the next sections of the Executive Summary will follow the structure below.



- A Portfolio Overview slide that provides a narrative summary of the respective Portfolio
- A summary of each Product Line within the Veteran Experience Services, Health Services, Benefits and Memorial Services, Corporate Services, and Technology and Platform Services Portfolios, including:
 - Descriptions of the current environment, drivers, key transformative initiatives, and future environment
 - Milestones that document transformative initiatives and decommissioning timelines
 - Architecture diagrams and graphics (if available)

The Enterprise Roadmap was developed in collaboration with OIT's Account Management Office; Enterprise Program Management Office; IT Operations and Services; Office of Technical Integration; Office of Information Security; Office of Strategic Sourcing; and Office of Quality, Performance, and Risk as well as the Board of Veterans' Appeals; Office of Business Process Integration; Office of Research and Development; Veterans Experience Office; and Office of Human Resources and Administration.

OIT Product Line Management Model

Portfolio	Product Line	VA Priority	OIT Strategic Goal	VA Priority Initiative(s)	PMA CAP Goal(s)
 Veteran Experience Services	Digital Experience	• Customer Service	• Goal 1: Deliver Exceptional Customer Experience	• Navigator	1, 2, 4
	Contact Center	• Customer Service	• Goal 1: Deliver Exceptional Customer Experience	• Navigator	1, 2, 4, 5
	Eligibility and Enrollment	• Customer Service	• Goal 1: Deliver Exceptional Customer Experience	• IT Modernization	1
	Customer Master Data Management	• Customer Service	• Goal 1: Deliver Exceptional Customer Experience	• IT Modernization	1
 Health Services	Medical Care	• Electronic Health Record	• Goal 5: Achieve seamless & secure data interoperability across VA, DoD & Partners	• EHRM	1, 2, 4
	Health Care Administration	• MISSION Act	• Goal 2: Drive IT and VA capability modernization through digital transformation	• Mental Health	2, 4
	Telehealth and Scheduling	• MISSION Act	• Goal 2: Drive IT and VA capability modernization through digital transformation	• Telehealth Modernization	1, 2, 4
	Medical Research, Education, and Population Health	• Electronic Health Record	• Goal 5: Achieve seamless & secure data interoperability across VA, DoD & Partners	• EHRM	1, 2, 4
	Community Care	• MISSION Act	• Goal 2: Drive IT and VA capability modernization through digital transformation	• VA Choice	1, 4, 9
	Supply Chain Management	• Business Systems Transformation	• Goal 3: Transform procurement and acquisition processes	• Supply Chain Modernization	1, 2, 7, 11
 Benefits and Memorial Services	Education and Veteran Readiness and Employment	• Business System Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• GI Bill	1, 2, 4, 9
	Compensation and Pension	• Business System Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• GI Bill	1, 2, 4, 9
	Loan Guaranty	• Business System Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• GI Bill	1, 2, 4, 9
	Insurance	• Business System Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• GI Bill	1, 2, 4, 9
	Appeals	• Business System Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• GI Bill	1, 2, 4, 9
	Benefits Integration and Administration	• Business System Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• GI Bill	1, 2, 4, 9
	Memorial Benefits and Services	• Business Systems Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• IT Modernization	1, 4

OIT Product Line Management Model (continued)

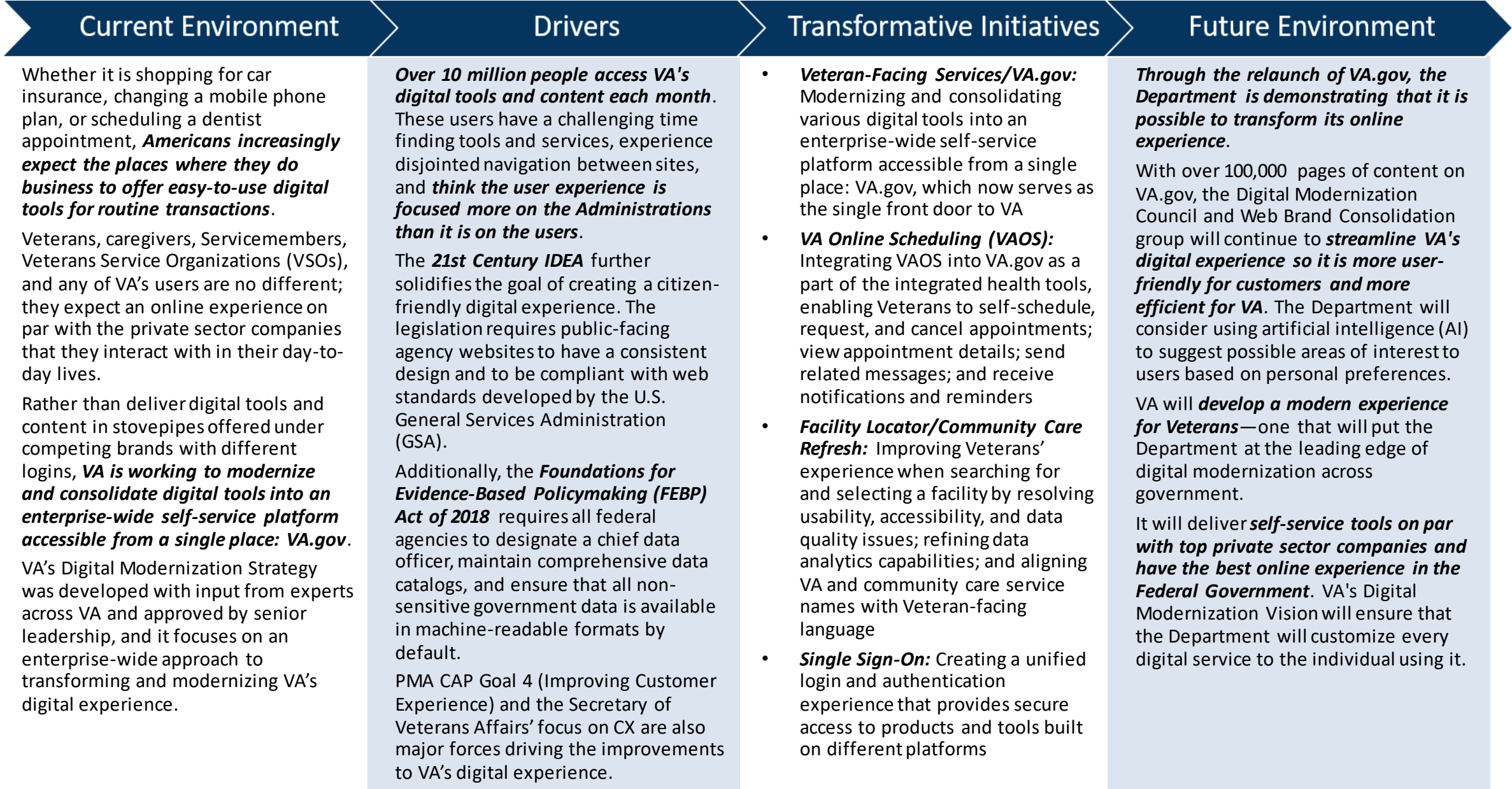
Portfolio	Product Line	VA Priority	OIT Strategic Goal	VA Priority Initiative(s)	PMA CAP Goal(s)
 Corporate Services	Acquisition and Property Management	• Business Systems Transformation	• Goal 3: Transform procurement and acquisition processes	• Supply Chain Modernization	1, 2, 7, 11
	Financial Management	• Business Systems Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• FMBT	1, 5, 7, 9, 10, 11, 12
	Human Capital Management	• Business System Transformation	• Goal 4: Inspire a culture of digital transformation, IT modernization, and customer service	• HR Modernization	1, 3, 4, 5, 6, 13
	SecVA/Congressional/Legal Affairs	• Business Systems Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• IT Modernization	1, 2, 4, 5
 Technology and Platform Services	IT Infrastructure Operations and Services	• Business Systems Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• IT Modernization	1
	Data Analytics and Knowledge Management	• Business Systems Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• Stop Fraud, Waste and Abuse	2, 4, 9, 14
	Cyber Security and Access Control Services	• Customer Service	• Goal 2: Drive IT and VA capability modernization through digital transformation	• IT Modernization	1
	Trusted Information Sharing	• Customer Service	• Goal 5: Achieve seamless & secure data interoperability across VA, DoD & Partners	• IT Modernization	1, 2, 4
	Platform Management	• Business Systems Transformation	• Goal 2: Drive IT and VA capability modernization through digital transformation	• IT Modernization	1
	End User Operations	• Customer Service	• Goal 1: Deliver Exceptional Customer Service	• IT Modernization	1

Veteran Experience Services Portfolio Overview

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>The Veteran Experience Services Portfolio supports VA in improving CX as Veterans, family members, and caregivers navigate the journey from military service through the spectrum of VA services.</p> <p>Veterans often have a fragmented and inconsistent experience when interacting with VA's contact centers or digital content, and the Department lacks a standardized method to verify Veteran status or link Veterans with their existing information at VA when they apply for services.</p> <p>VA is committed to creating an interactive experience with the Veteran that is consistent, easy, intuitive, and personalized. This includes modernizing its digital tools and consolidating, integrating, and sharing data across the Department.</p>	<p>VA provides services to 10 million Veterans, survivors, family members, caregivers, and personal representatives, and over 10 million people access its digital tools and content each month.</p> <p>Disparate technology, siloed data, and unstandardized processes contribute to a variable and disjointed CX. This makes it difficult for users to find and navigate VA's digital tools and content, inhibits VA from tracking a single engagement record for a Veteran, and results in frequent and multiple requests for Veterans to prove their identity and status.</p> <p>The PMA and 21st Century Integrated Digital Experience Act (21st Century IDEA) further call for a world-class, Veteran-centric CX. VA is also serving as the lead agency for PMA Cross-Agency Priority (CAP) Goal 4 (Improving Customer Experience).</p>	<ul style="list-style-type: none">• Veteran-Facing Services/VA.gov• VA Online Scheduling (VAOS)• Enterprise Contact Center Modernization (ECCM)• White House VA Hotline• Veterans Signals (VSignals)• Enrollment System Modernization (ESM)• VA Data Access Modernization• VA Profile	<p>The Department will deliver seamless and personalized experiences for Veterans and customers across all digital services and communication channels. It will provide a unified, consistent experience that benefits Veterans regardless of how they interact with VA.</p> <p>VA will streamline and modernize its digital experience to put the Department at the leading edge of digital modernization across government. An authoritative data source (ADS) will also provide accurate and consistent customer profile data that is easily and reliably accessible.</p> <p>The Department will be able to focus entirely on the customer's experience—regardless of the nature of the service it is providing—and build long-term relationships as part of a holistic approach that treats Veterans, not just their conditions.</p>



Veteran Experience Services: Digital Experience





DIGITAL EXPERIENCE MILESTONES*

F Y 2020 - F Y 2026

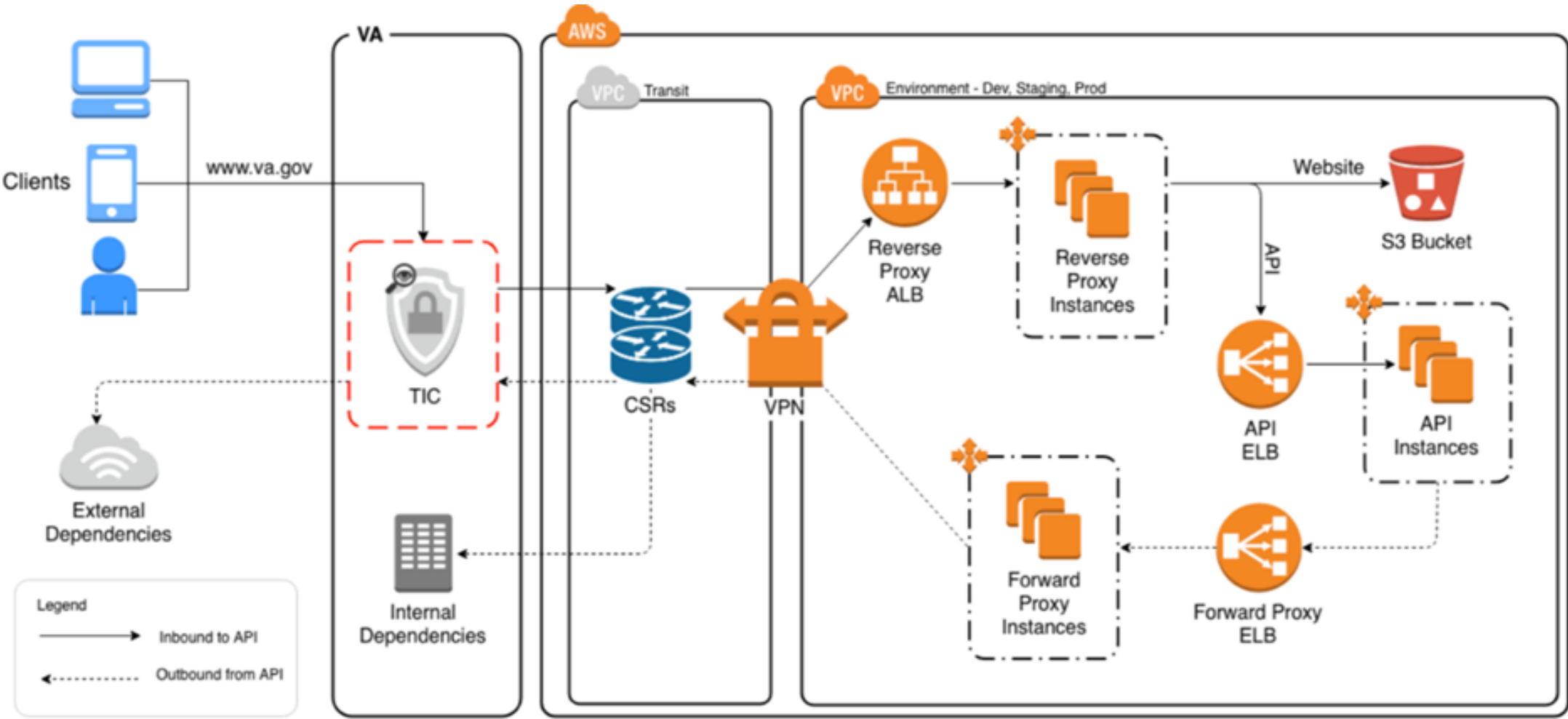
✓ Funded
➤ Unfunded/
Pre-decisional

* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Decommission Explore.VA.gov	➤ Q1: Deploy Integrated My Health Dashboard minimum viable product	➤ Q3: Expand mobile services and videoconferencing capabilities to support suicide prevention programs and mental health care in rural areas	➤ Q3: Expand mobile services and videoconferencing capabilities to support suicide prevention programs and mental health care in rural areas	➤ Q4: Implement AI to detect patterns in data and provide actionable insight that improves CX	➤ Q2: Complete DD Form 214 Process Integration	➤ Q4: Update VA.gov to respond to 5G technology
✓ Q1: Migrate to Drupal Content Management System	➤ Q2: Deploy Dashboard 2.0 on VA.gov	➤ Q3: Expand integration and APIs with Benefits Integration Platform (BIP)	➤ Q3: Expand integration and APIs with BIP	➤ Q4: Initiate integration with DoD's electronic version of the DD Form 214 Process	➤ Q4: Implement intelligent software to create agile infrastructure that automates software and service updates to respond to evolving business needs	➤ Q3: Expand AI to other services on VA.gov platform
✓ Q2: Complete Benefits and Appeals Modernization	➤ Q2: Rebuild eBenefits Tools and Features in VA.gov	➤ Q4: Implement Tier 3 content and navigation	➤ Q4: Deploy Digital Experience enhancements based on VA Priorities, user research, and customer feedback	➤ Q4: Deploy Digital Experience enhancements based on VA Priorities, user research, and customer feedback	➤ Q4: Deploy Digital Experience enhancements based on VA Priorities, user research, and customer feedback	➤ Q4: Deploy Digital Experience enhancements based on VA Priorities, user research, and customer feedback
✓ Q2: Support implementation of MISSION Act Phase III	➤ Q4: Decommission eBenefits	➤ Q4: Implement Vet Center, Regional Offices, and NCA Redesign				
✓ Q2: Launch consolidated Online Scheduling on VA.gov	➤ Q4: Implement Tier 2 content and navigation	➤ Q4: Deploy Digital Experience enhancements based on VA Priorities, user research, and customer feedback				
➤ Q3: Deploy Profile 2.0 on VA.gov	➤ Q4: Expand VAMC Redesign across all facilities					
✓ Q4: Deploy Facility Location 2.0	➤ Q4: Deploy Digital Experience enhancements based on VA Priorities, user research, and customer feedback					
✓ Q4: Deploy Digital Transition Assistance Tools	➤ Q4: Integrate Cerner EHR into Patient Portal on VA.gov					
✓ Q4: Deploy Caregiver Application on VA.gov						
✓ Q4: Enhance data mining and predictive analytics capabilities throughout VA.gov						

VISION:
The completion of Digital Experience milestones will enable VA to streamline the Department's digital environment so it is more efficient and user-friendly for customers and improves Veteran experience.

VA.gov Topology Basics





Veteran Experience Services: Contact Center

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>VA provides a wide range of services to 10 million Veterans, survivors, family members, caregivers, and personal representatives, and during the delivery of these services, the Department receives 140 million calls annually. VA also uses various customer relationship management (CRM) technologies to effectively communicate with the population that it serves.</p> <p>Veterans expect VA to offer intuitive CX, self-service options for routine transactions, and exemplary customer service. However, VA currently lacks an omnichannel operating model that is coordinated across the enterprise. Therefore, Veterans often have fragmented and variable encounters with contact centers that include unanswered phone calls, long wait times, and overwhelming written materials. Additionally, VA Medical Centers (VAMCs) and other VA facilities use differing CRM technologies, which has led to a proliferation of non-standardized tools and inconsistent CX.</p> <p>This prevents VA from providing a seamless Veteran experience that meets industry standards. The Department is committed to creating an interactive experience with the Veteran that is consistent, easy, intuitive, and personalized. Therefore, it is planning to transition all of its contact centers and associated CRM and knowledge management (KM) tools to a single enterprise application.</p>	<p>VA's contact centers are the door to a complex environment that Veterans must navigate when contacting the Department. They are implemented by each Administration and regionally through VAMCs. This results in over 1,800 VA contact centers that have varying levels of maturity. Each one operates in an independent, unstandardized manner with fragmented equipment, technologies, and processes. This creates multiple redundancies, inefficient operations, and an inconsistent CX.</p> <p>VA's use of disparate CRM technology also results in inconsistent Veteran experience and inhibits its ability to track a single engagement record. The Department must develop a CRM strategy and implement a unified platform in order to address these issues and provide excellent customer service. VA is currently working with the White House, OMB, and GSA to support a government-wide center of excellence that is dedicated to call centers, which will assist in considering a unified CRM strategy for enterprise-wide deployment.</p> <p>Additionally, the PMA and 21st Century IDEA are driving contact center and CRM transformation. VA is serving as the lead agency for PMA CAP Goal 4, advising 14 other federal agencies in achieving improved CX, and the 21st Century IDEA is placing the focus on agency CIOs to more broadly assume the leadership role for CX.</p>	<ul style="list-style-type: none">• Enterprise Contact Center Modernization (ECCM): Consolidating the existing network of contact centers into an enterprise-wide Veteran Contact Center through a unified CRM and KM platform and technology• Virtual Care in VHA Clinical Contact Centers: Transforming hundreds of fragmented and antiquated call centers into modern, regional/VISN virtual care centers to achieve clinically meaningful first-contact resolution via omnichannel virtual triage• White House VA Hotline: 24/7 crisis line for at-risk Veterans that interfaces with the Master Veteran Index (MVI) and will deliver additional reporting capabilities, self-service for Veterans, and enhanced call center capabilities• CRM/Unified Desktop Optimization (UD-O): Deploying expanded CRM functionality to Veterans Benefits Administration (VBA) call agents to allow them to quickly and accurately respond to Veterans' inquiries and enable integrated access to customer service centers• Veterans Signals (VSignals): A customer experience management tool that empowers Veterans, eligible dependents, caregivers, survivors, VA employees, VSO members, and community leaders to provide near real-time feedback for services and benefits provided by VA	<p>By breaking down institutionalized silos and transforming the Department's approach to customer service, VA will deliver seamless and personalized experiences for all Veterans across every touchpoint and channel.</p> <p>Contact center modernization will deliver a unified experience that is consistent and benefits Veterans regardless of how they choose to interact with VA. It will use a Veteran-centric omnichannel operating model in order to decrease complexity and provide ease of access for Veterans. VA will create a "post channel" world in which multiple forms of interaction or omnichannel engagement blend to create the best CX.</p> <p>The Department will provide a modern, streamlined, and responsive CX for those who contact VA contact centers. It will improve the level of care available to Veterans by eliminating and unifying facilities and technology stacks and standardizing processes. It will also define and implement a unified CRM strategy built on an integrated commercial platform in order to improve access to VA through state-of-the-art CRM and self-service tools.</p> <p>Using an enterprise CRM platform, VA will gather data and communicate with Veterans through the channel of their preference. The enterprise-wide CRM solution will allow VA to proactively deliver the right care to the right Veterans at the right time.</p>



CONTACT CENTER MILESTONES*

F Y 2020 - F Y 2026

✓ Funded
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Pre-decisional

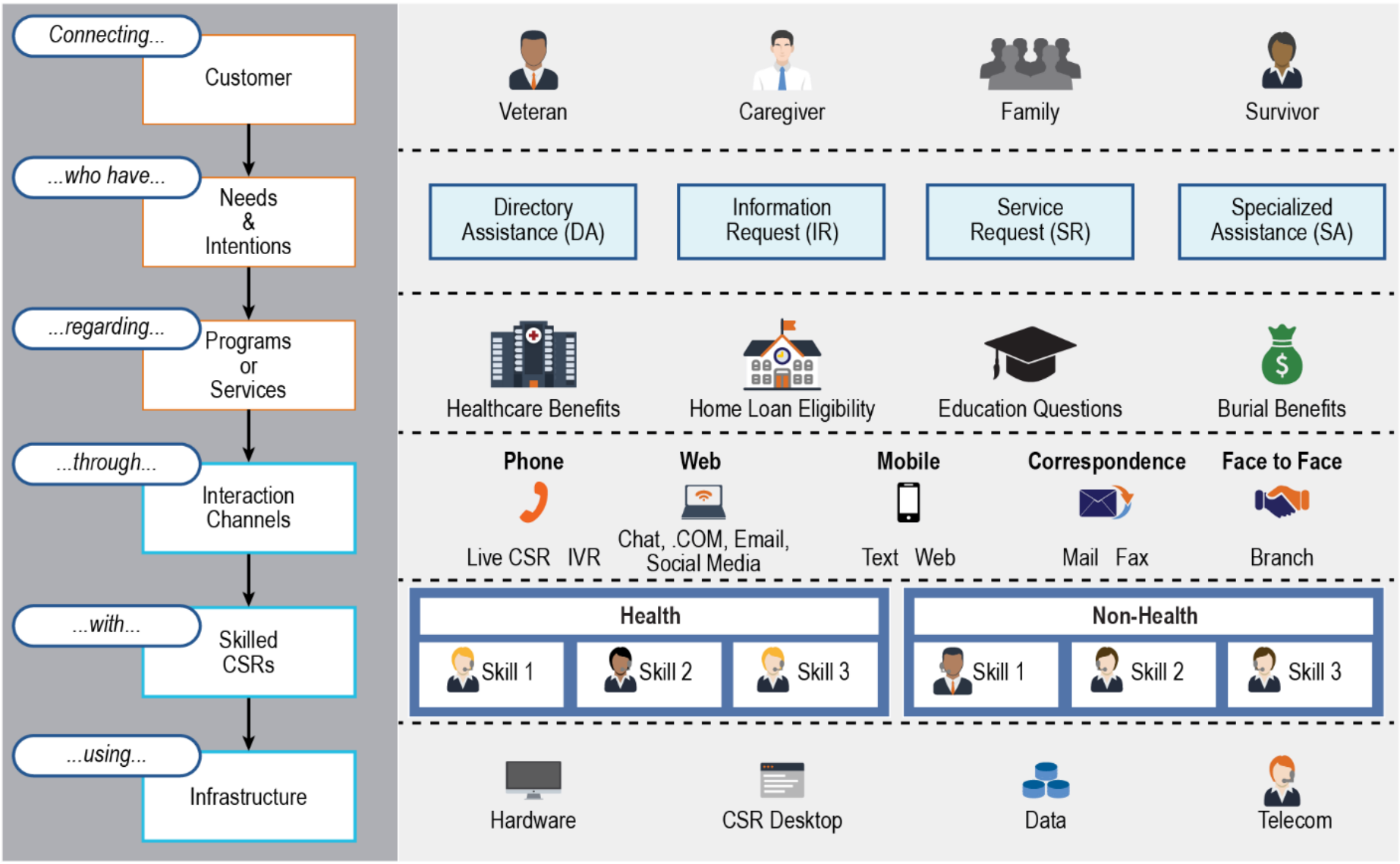
* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Complete VAM upgrade and expansion	➤ Q1: Integrate Members Services VBMS with HEC				➤ Q1: Complete ECCM	
✓ Q1: Deploy VASS minimum viable product	➤ Q1: Deploy enhancements for Member Services Call Centers					
✓ Q1: Complete CommCare C3 Expansion and Optimization IOC	➤ Q1: Incorporate Mobile Applications into VSignals					
✓ Q1: Deploy Community Signals	➤ Q1: Incorporate VR&E feedback channel into VSignals					
➤ Q1: Deliver Member Services FP and CPAC minimum viable product	➤ Q1: Incorporate Community Care feedback channel into VSignals					
➤ Q1: Deploy UD-O Enhancements	➤ Q1: Incorporate IC3 feedback channel into VSignals					
➤ Q2: ECCM Phase 1: Integrate VA Profile with Contact Centers	➤ Q1: Incorporate ORM feedback channel into VSignals					
✓ Q2: Deploy VASS Phase 2 to enable system automation/agent interaction	➤ Q1: Incorporate HR&A feedback channel into VSignals					
➤ Q2: Complete CRM/UD-O usability enhancements	➤ Q2: Implement ECCM Phase 2 Tier 1					
➤ Q2: Deploy Member Services CRM to FP/CPAC & deploy HEC-CRM	➤ Q2: Incorporate OPIA feedback channel into VSignals					
➤ Q2: Deploy PATS-R Nationwide	➤ Q2: Incorporate INS feedback channel into VSignals					
✓ Q2: Incorporate Emergency Medicine, Inpatient, & Appeals feedback channels into VSignals	➤ Q3: Incorporate LGY feedback channel into VSignals					
✓ Q3: Deploy VASS post minimum viable product and IVR	➤ Q3: Incorporate FSC feedback channel into VSignals					
➤ Q3: Integrate CRM Applications with VA Veteran Profile	➤ Q4: Incorporate Fiduciary feedback channel into VSignals					
➤ Q3: Member Services HRC FP/CPAC Go Live and HEC-CRM Go Live	➤ Q4: Incorporate TED feedback channel into VSignals					
➤ Q3: Implement ECCM Phase 1 Tier 1						
✓ Q4: Integrate CommCare PATS-R, VSignals, CPRS/VA Profile						

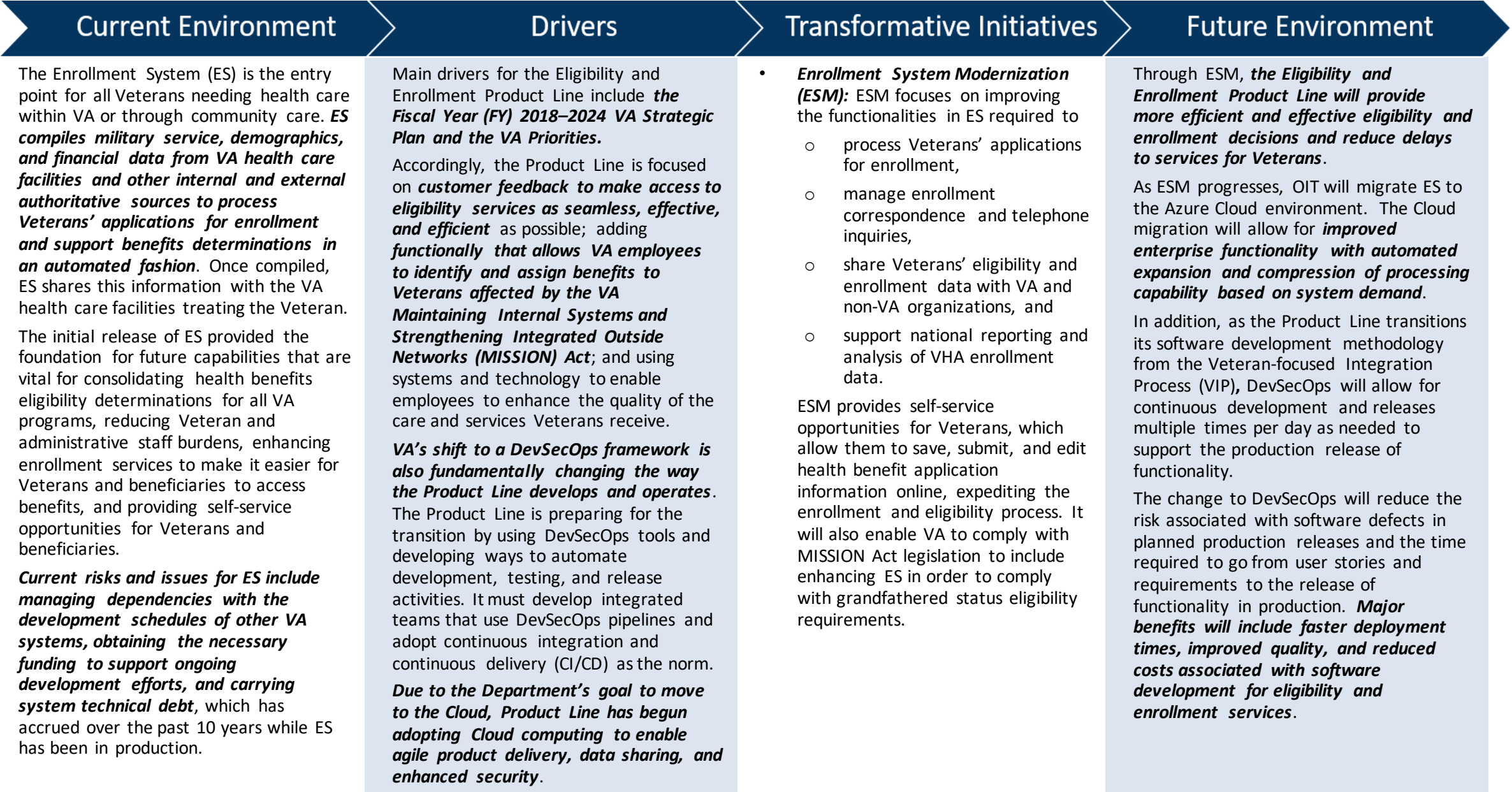
VISION:

The completion of Contact Center milestones will enable the transformation of the Department's current approach to customer service by delivering seamless and personalized experiences for Veterans across every touchpoint and channel.

ECCM Veteran-Centric Operating Model



Veteran Experience Services: Eligibility and Enrollment





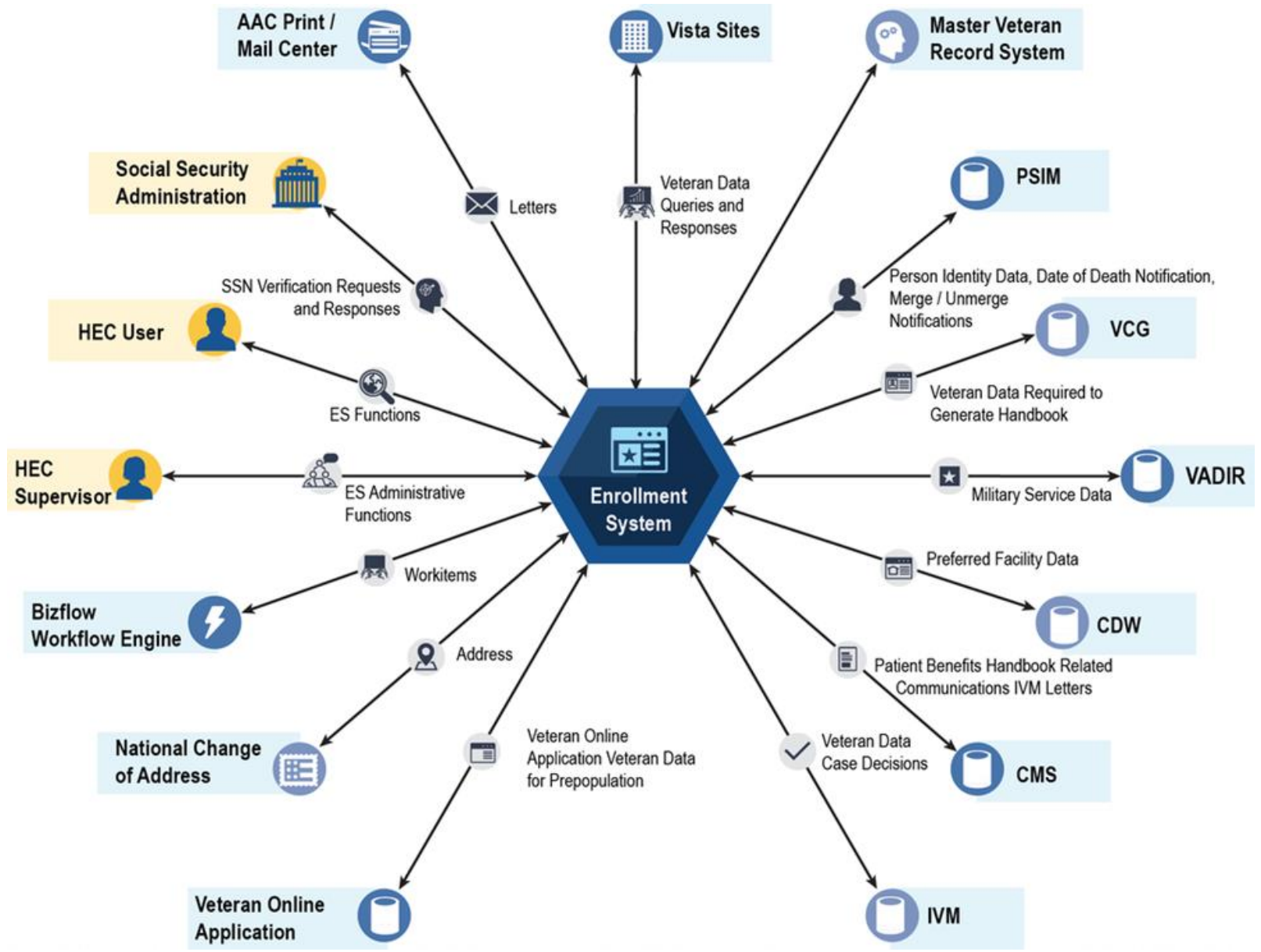
- ✓ Funded
- » Unfunded/
Pre-decisional

* Timelines may shift due to changes in resources and priorities

VISION:
The completion of Eligibility and Enrollment milestones will provide Veterans with self-service options that will enable VA to make more efficient and effective eligibility and enrollment decisions and reduce delays to Veterans for services.



Enrollment System





Veteran Experience Services: Customer Master Data Management

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>Across VA and beyond, providing services to Veterans requires determining who they are, confirming military service information, and comprehensively linking program records from across the Department. Yet, there is not currently a single, simple, centralized method to reliably and accurately verify the Veteran status of a given individual or link an individual with all the information VA may have about that person.</p> <p>Existing identity databases are incomplete, difficult to integrate with, and funded under a pay-to-play model. This leads business lines to execute their own individual identity checks and add records via non-standard methods. Different VA components do not trust authoritative sources and regularly check different databases in different ways, leading Veterans to be accurately identified for receipt of some services but not for others.</p> <p>VA's multi-channel strategy depends on an infrastructure built on effective management of customer data and the delivery of an authoritative 360-degree view of its customers, spanning from military service to discharge to Veteran status. The centerpiece for VA Customer Data is VA Profile, which provides this 360-degree view and is being designed for enterprise-wide use as "One Source of Truth."</p>	<p>Currently, a Veteran who applies for a VA benefit or service is frequently asked to prove his or her identity and Veteran status by producing a DD-214 or other evidence, even if VA already has a record of the person's service. Depending on the sequence in which Veterans apply for benefits, they may even be asked to prove their status to VA multiple times despite having already done so before.</p> <p>Additionally, Veteran studies have shown that VA's key customers are frustrated and confused by the lack of uniformity of their basic common data across the Department. Due to multiple sources and the lack of a standard process for verifying addresses, VA struggles to reconcile and maintain accurate mailing addresses for Veterans. Erroneous mailing address data results in the Department sending prescriptions and other health care related correspondence to incorrect addresses.</p> <p>Managing data at an enterprise level reduces IT development lifecycles; lowers project failure rates; enables enterprise applications; and provides analytics and cross-unit data/information for decision making. The most critical dependency for Customer Master Data Management is the successful partnership of the Veterans Experience Office (VEO), businesses, and OIT in communicating and collaborating effectively to deliver these critical data management services.</p>	<ul style="list-style-type: none">• VA Data Access Modernization: Establishing VA Profile as a comprehensive customer profile to ensure that all data consumers can quickly and easily access up-to-date, authoritative administrative data on Veterans• VA Identity and Military History Data Strategy: Improving the comprehensiveness and integrity of VA's identity and military service data so that relevant data sources contain all known Veterans and military service records• VA Profile: An enterprise-wide ADS to establish, maintain, and synchronize Veteran, Guardian, and Associated Individual customer profile data and a centralized place for VA systems to access this information• Customer Experience Data Warehouse (CxDW): Consolidating customer data and metrics from across the agency into a single usable database so that a complete picture of a Veteran's journey can be formed• Veterans Information Solution/VA DoD Identity Repository (VIS/VADIR): Enabling bi-directional sharing of information between the U.S. Department of Defense (DoD) and VA to improve automation and processing efficiencies	<p>Veterans will provide their data to VA just once rather than repeatedly for different services, and in many cases, Servicemembers' data will be automatically available prior to engaging with VA. Internal teams will know where to find authoritative data when building applications and will be able to easily and reliably access that data.</p> <p>The Cerner Electronic Health Record (EHR) will have a single authoritative source for VA and DoD administrative patient data, and a thriving ecosystem of private sector innovators will deliver world-class services to Veterans and other VA customers securely using VA data.</p> <p>Additionally, VA Profile will build the foundation for VA's enterprise master data management solution and streamline data collection and dissemination to ensure that there is accurate and consistent information in a central repository.</p> <p>As a result of the initiative, Veterans will have the ability to update information as well as a comprehensive view of their Master Records. At full operating capability (FOC), VA Profile will have governance, data, services, tools, processes, and technology that VA can reliably use for customer service activities, operations, and data profiling.</p>



CUSTOMER MASTER DATA MANAGEMENT MILESTONES*

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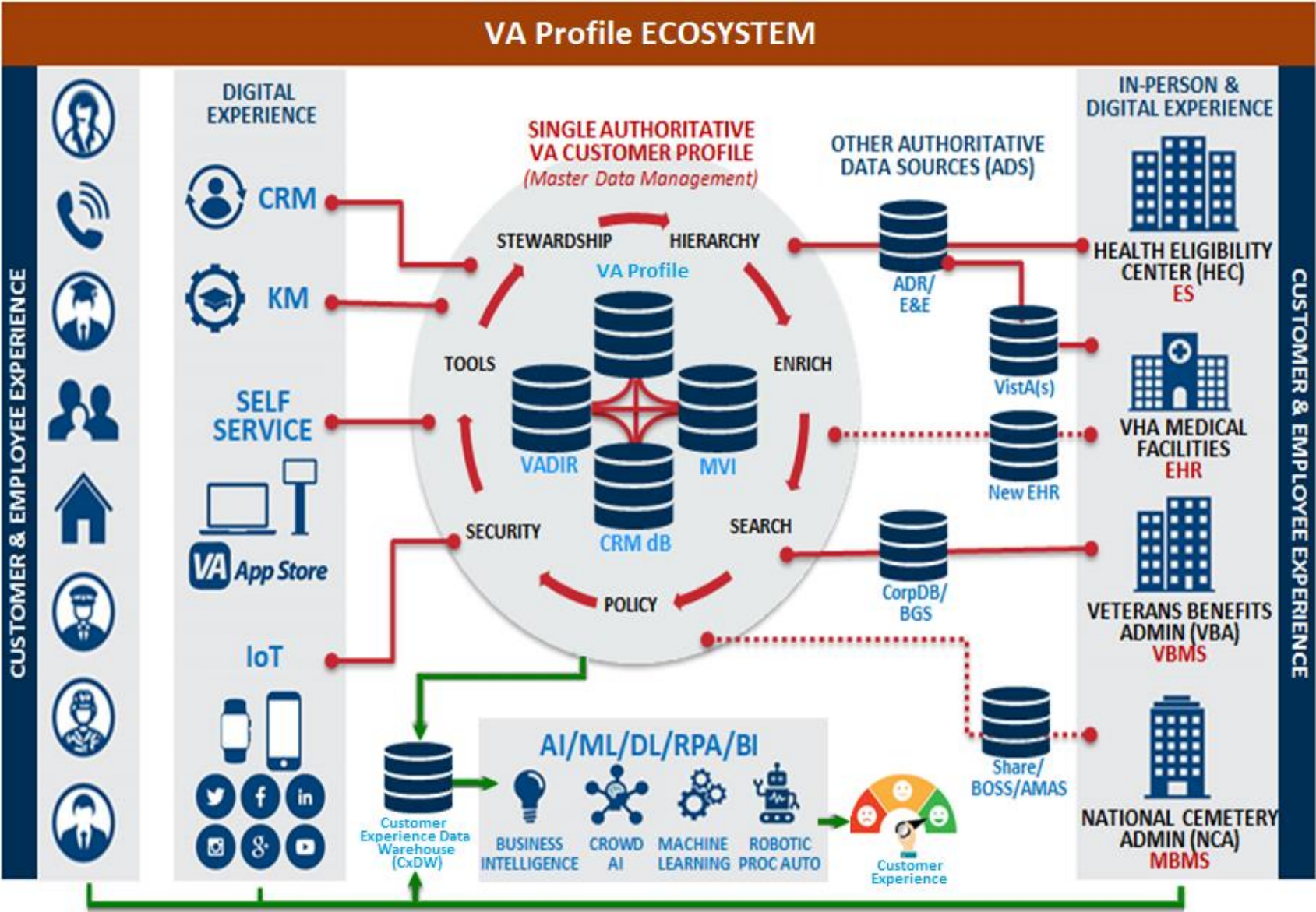
✓ Funded
➤ Unfunded/
Pre-decisional

* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Enable VADIR to provide VA Profile with authoritative customer information	➤ Q4: Deploy FOC of original Cx DW requirements set					
✓ Q1: Enhance VADIR to Produce VBA Data File in support of Mental Health Executive Order						
✓ Q1: Complete MSDS Integration with MPI						
✓ Q2: Enhance VA Profile to include HIE, Awards Service, Rating Service, Military Payments						
➤ Q2: Integrate VA Profile with Vista address validation and Cerner App for VBA Rating Data						
➤ Q2: Complete VADIR/VASS Integration						
➤ Q3: Enhance VA Profile to include Fiduciary Contact Information, Compensation and Pension Payment Mailing Address, Fraud Indicator, Veteran Status & Awards						
➤ Q3: Integrate VA Profile with Mobile Apps, e-VA for Contact Information, and DD/EFT for VHA						
➤ Q4: Enhance VA Profile to include Military Service Episode, Military Occupation, Prisoner of War, and Power of Attorney Contact Information						
➤ Q4: Integrate VA Profile with VASS/Caregiver Program for Contact Information, Rating, Awards & Military						
✓ Q4: Complete technical analysis and design for support of Cx DW						

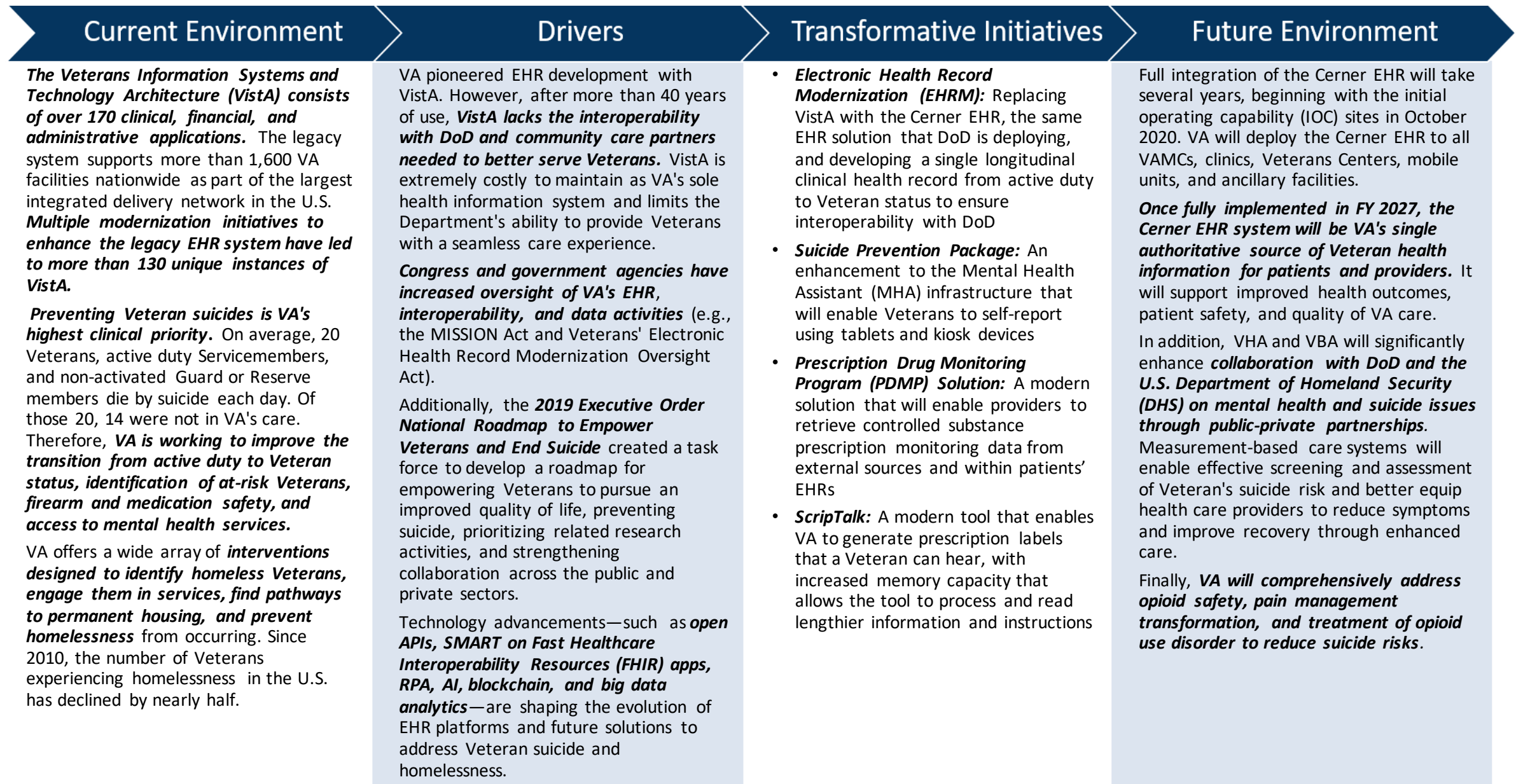
VISION:
The completion of Customer Master Data Management milestones will build the foundation for VA's enterprise master data management solution that streamlines data collection and dissemination in an authoritative central repository.

VA Profile Ecosystem



Health Services Portfolio Overview

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>Supporting the VA Priorities, VHA's three priorities are to Restore Trust, Create a Learning Organization, and Modernize Systems. Modernization is VHA's blueprint to deliver on both sets of priorities to create a VHA that always anticipates and meets the needs of Veterans, its employees, and other beneficiaries.</p> <p>To support VHA's aim of becoming a high reliability, clinically integrated, and Veteran-driven organization, improvements are needed in the delivery of services and benefits, diffusion of best practices, and enhanced employee engagement.</p> <p>VA's goal is to provide Veterans with the care they need at the right time, at the right place, and from the right provider. Accordingly, the Department is modernizing the way it delivers health care to over nine million Veterans by transitioning VHA from legacy IT systems to a modern, commercially focused suite of applications. The Health Services Portfolio provides advanced technology solutions to enable this transition and ensure modern, high-quality, and efficient medical care delivery.</p>	<p>VHA has been the subject of several critical assessments that highlight deficiencies in care, customer service, Veteran access, and integrated service delivery between VHA and the community.</p> <p>Enterprise risks contributing to its organizational deficiencies include lack of reliable data and analysis, inefficient human capital management, and disjointed performance management.</p> <p>Additionally, legislation such as the MISSION Act and Anywhere to Anywhere (ATA), are fundamentally transforming the way that VA provides care and services to Veterans.</p> <p>In times of national crisis, such as the current coronavirus pandemic, VA provides services to the nation based on requests from states while being clear that Veterans are first. This is known as VA's Fourth Mission. VA has determined to make 1,500 beds available for the Federal Emergency Management Agency (FEMA) for non-Veteran patients at various VA locations around the country.</p>	<ul style="list-style-type: none">• Electronic Health Record Modernization (EHRM)• Suicide Prevention Package• Prescription Drug Monitoring Program (PDMP) Solution• Centralized Scheduling Solution (CSS)• Telehealth Modernization• VA Video Connect (VVC)• Multi-Cloud Research Environment• Community Care Modernization• Community Care Referral and Authorization (CCRA)• Caregiver Record Management Application (CARMA)• Defense Medical Logistics Standard Support (DMLSS)	<p>The Health Services Portfolio will provide innovative solutions to support VHA in becoming a high reliability organization and delivering exceptional, coordinated, and connected care for Veteran health and well-being. More specifically, it will modernize care and service delivery by operationalizing the VA Priorities.</p> <p>VHA's Veteran-centric health modernization initiatives will enhance CX and improve Veterans' trust in VA through consistent and accessible customer interaction channels. By striving to eliminate regulatory barriers, VA will increase Veterans' access to care in their local communities and particularly improve access for those in rural or underserved areas.</p> <p>Other Health IT systems will provide clinicians, administrators, and patients with the IT tools that are not part of the EHR but are needed to support health care delivery. VHA technology will ultimately align with its structures, processes, and people to deliver new experiences for employees, partners, and Veterans.</p>



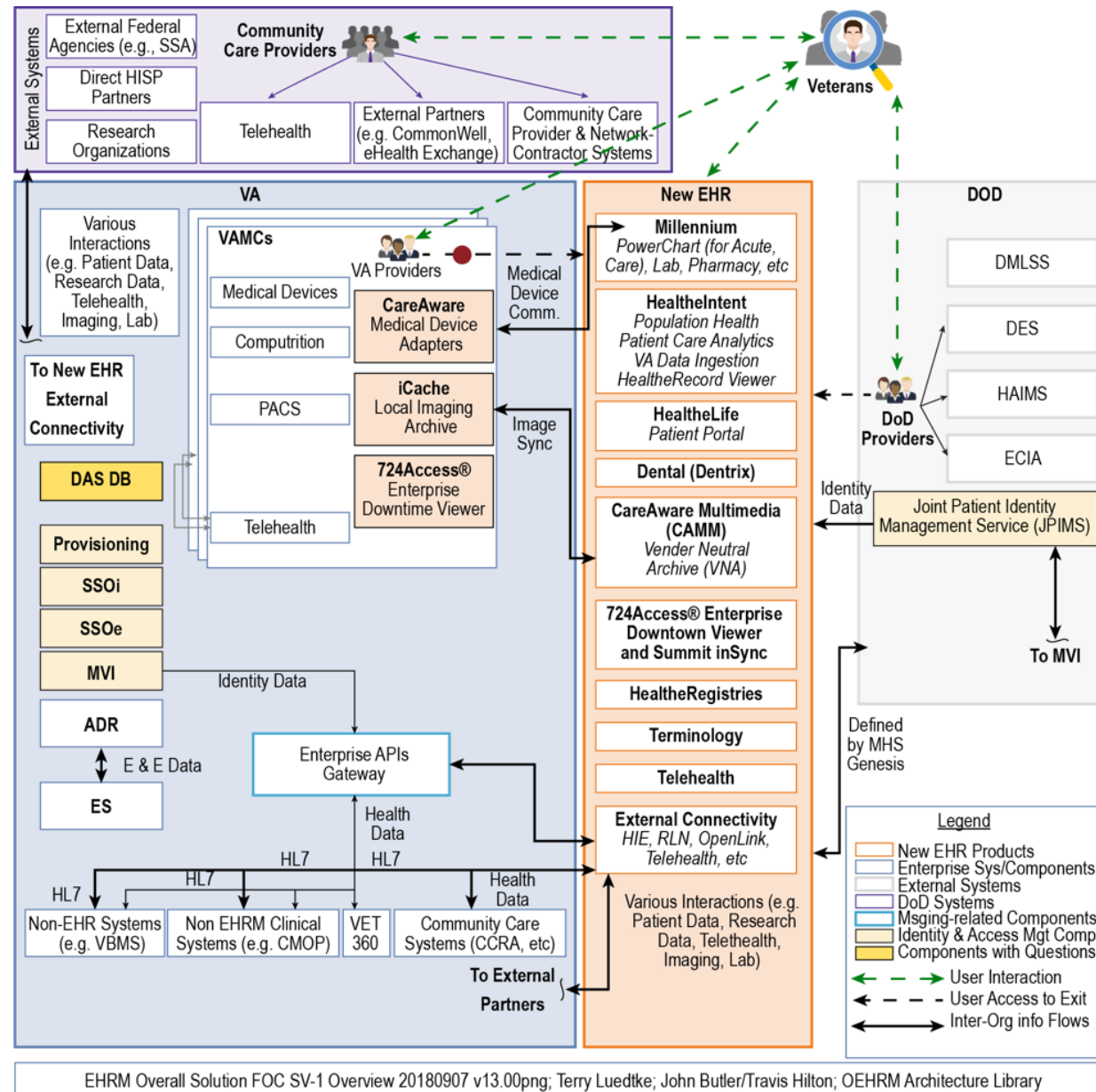


- ✓ Funded
- » Unfunded/
Pre-decisional

VISION:

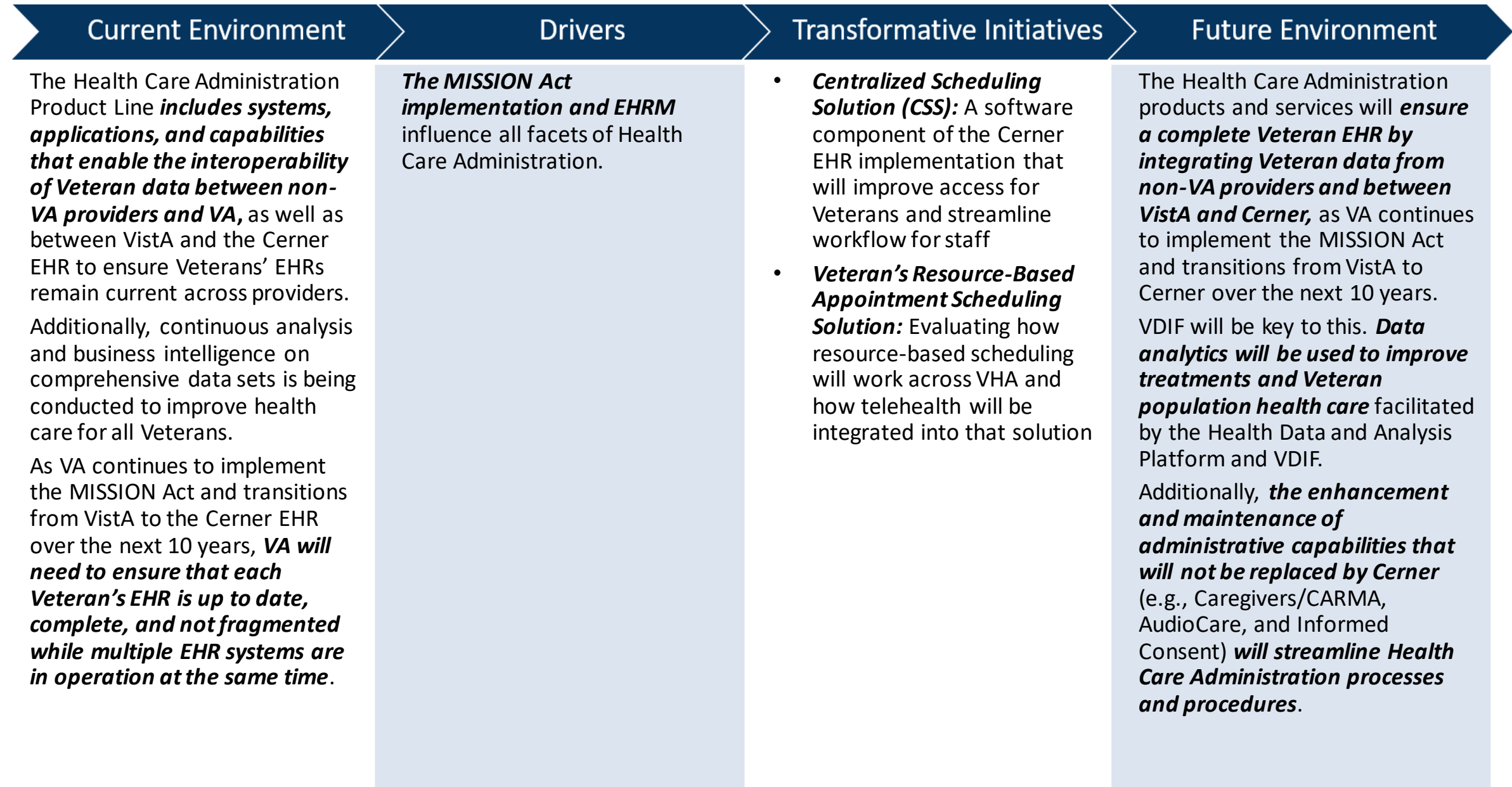
The completion of Medical Care milestones will enable the implementation of the Cerner EHR as VA's single authoritative source of Veteran health information for patients and providers that supports improved health outcomes and quality of VA care.

EHRM Future Environment FOC Overview





Health Services: Health Care Administration





- ✓ Funded
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Pre-decisional

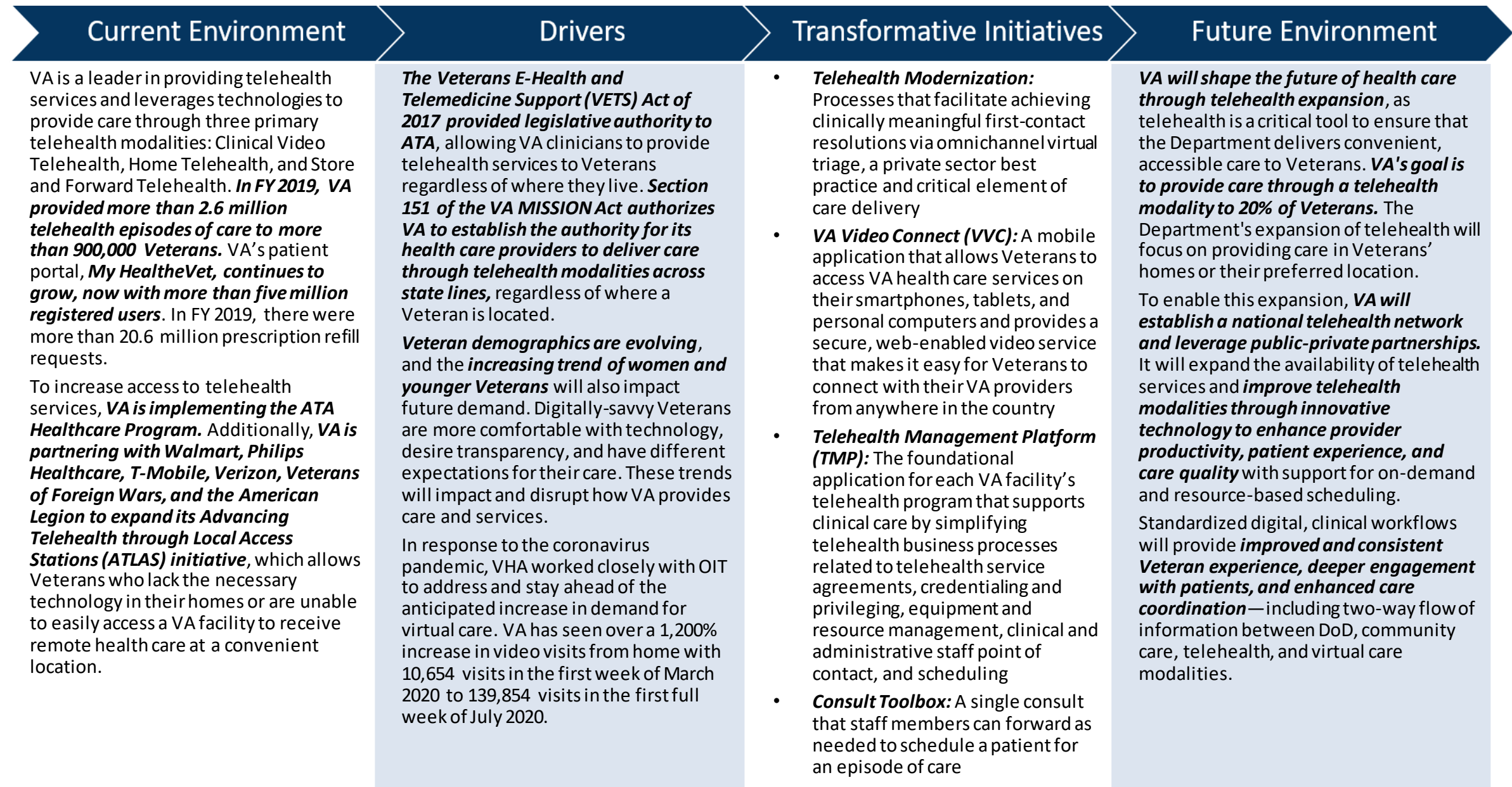
FY 2026

Q1: PCMM Interfaces with Cerner CSS

The completion of Health Care Administration milestones will enable the implementation of MISSION Act requirements and data analytics that improves the care experience, treatments, and outcomes of Veterans and dependents.



Health Services: Telehealth and Scheduling





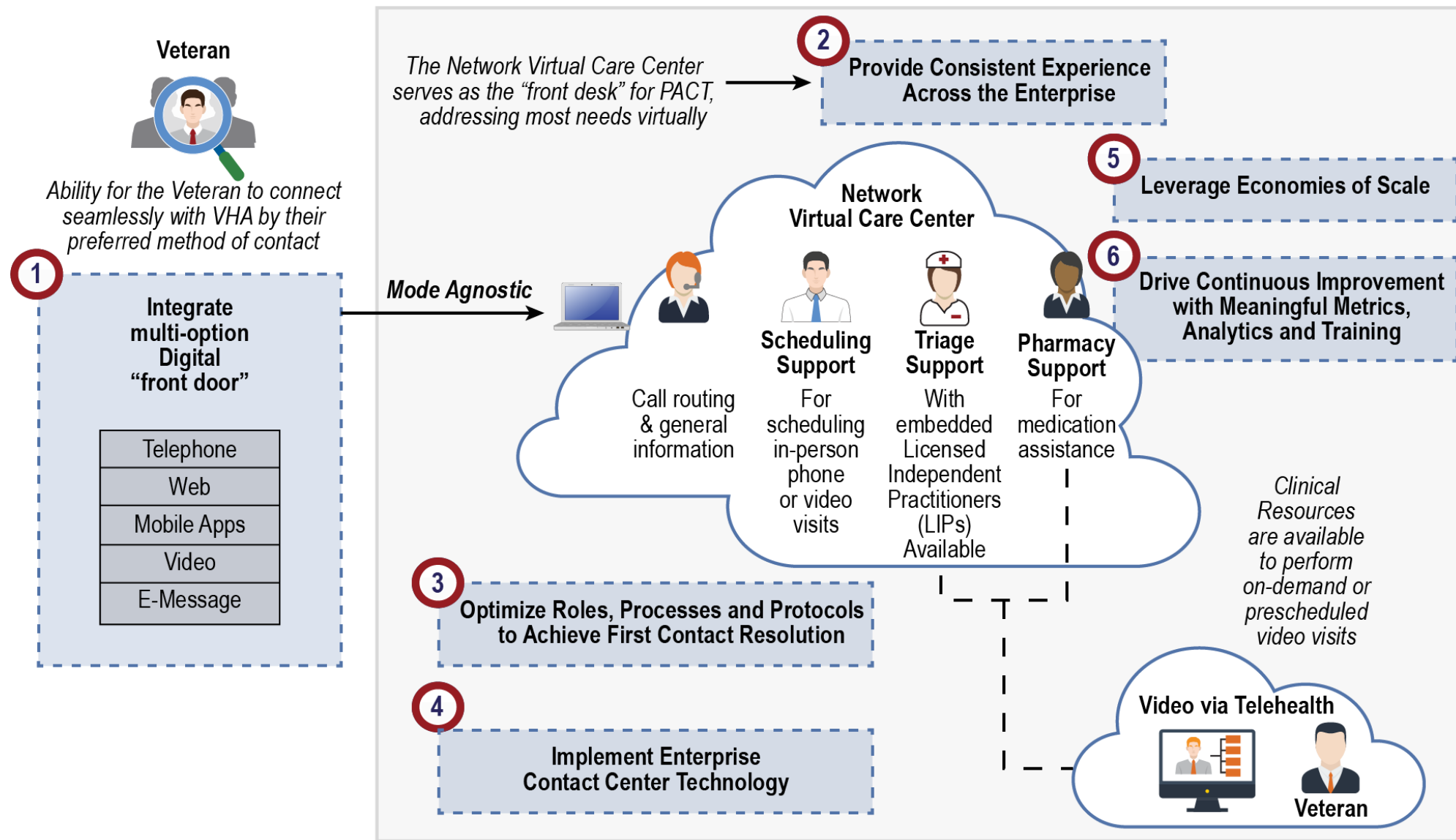
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- » Unfunded/
Pre-decisional

VISION:

The completion of Telehealth and Scheduling milestones will enable medical providers to deliver care to Veterans nationwide regardless of location and expand and enhance access to services that improve timeliness of care and engagement.



Future Environment of VA's Virtual Care Center Model





Health Services: Medical Research, Education, and Population Health

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>VA uses analytics as one of its tools to improve health care for Veterans. The Department has one of the largest health care related data repositories in the world, the Corporate Data Warehouse (CDW), and maintains 24 years of data on over 22 million Veterans. VA also hosts the Million Veteran Program (MVP), which has the world's largest gene bank. However, VA's analytical capabilities have long lagged behind other federal agencies and industry counterparts, especially in Cloud computing.</p> <p>The current analytics environment is fragmented and constrained by infrastructure and resource limitations even though the Cloud offers accelerated speed of execution, agility, and lower cost.</p> <p>VA is frequently unable to control VA research data throughout the data lifecycle (from generating, sharing, and archiving data), and it has had difficulty sharing this information with researchers tasked with developing advanced medical treatments.</p> <p>VA Research has three primary goals: (1) increase Veterans' access to high-quality clinical trials, (2) increase the substantial real-world impact of VA research, and (3) put VA data to work for Veterans. In order to meet these goals, VA research has developed a research Enterprise Architecture (EA) to improve how it uses data to make real-time, fact-based decisions.</p>	<p>VA is subject to several regulatory compliance standards including Federal CIO guidance (the Cloud Smart policy and Federal Data Center Consolidation Initiative), Federal Information Security Management Act (FISMA), Federal Information Technology Acquisition Reform Act (FITARA), National Archives and Records Administration (NARA), Health Insurance Portability and Accountability Act (HIPAA), Privacy Act, and Protections for Human Subjects (45 CFR Part 46).</p> <p>Additionally, many independent groups audit VA research data including the Office of the Inspector General, Office of Information & Technology, VHA Privacy Office, VHA Office of Research Oversight and others. Audits for control of research data over the entire data lifecycle must be maintained.</p> <p>VA must invest in analytical tools and train their workforce to better analyze and interpret data, utilizing analytics to improve quality of care. New classes of skilled employees are needed that combine domain expertise, engineering, and statistical expertise.</p> <p>Managing large amounts of data of different data types, with different sets of provenances and different data ownership/stewardship requirements, influences Medical Research, Education, and Population Health modernization.</p>	<ul style="list-style-type: none">• VA Informatics and Computing Infrastructure (VINCI): Provides storage and server technologies to securely host national data and provides the necessary systems to allow access to the data along with the tools for reporting and analysis in a secure, virtual working environment• Genomic Information System for Integrative Science (GenISIS): A high-performance computing system that supports genomic research, hosts the MVP genomics data, and makes that data and the genomic tool sets needed to analyze the data available to VA MVP scientists• Department of Energy (DOE) Partnership: Aims to advance medical treatment for Veterans and the greater population through the MVP - Computational Health Analytics for Medical Precision to Improve Outcomes Now (CHAMPION) and Advanced Computational and Translational Initiatives for Veterans (ACTIV)• Multi-Cloud Research Environment: Hybrid, multi-Cloud environment that will be coordinated by a system orchestrator and consist of phenomics, imaging, genomic, and de-identified data	<p>Artificial Intelligence</p> <p>The VHA Office of Research and Development has laid out a blueprint for advancing AI development through a program of data curation and collaboration between private and public research institutions. Collaborations like this will serve as a template for VA to advance its AI research. Sharing newfound applications of AI and ML between the Federal Government and private sector will allow for the consilience of best practices, creating a knowledge base that would be unfeasible were the two spheres to work in isolation. Focused on strategies, policy, and partnerships, VA's AI Institute will play a greater role in the VA research IT EA as it matures.</p> <p>Cerner Population Health Platforms</p> <p>The transition to the Cerner EHR via EHRM will bring a suite of platforms into grasp for VA research, education, and population health. The opportunity to see a longitudinal Veteran record (extending from active duty status to Veteran status) data as part of these population health analytic platforms represents a major advance. The EHRM data migration and data syndication plans begin to link VA's traditional data model, and technologies to the newer Cerner data model and technologies and careful attention to developments and maturity of these platforms is needed as the 10-year implementation horizon advances.</p>



MEDICAL RESEARCH, EDUCATION, AND POPULATION HEALTH MILESTONES*

F Y 2020 - F Y 2026

✓ Funded
➤ Unfunded/
Pre-decisional

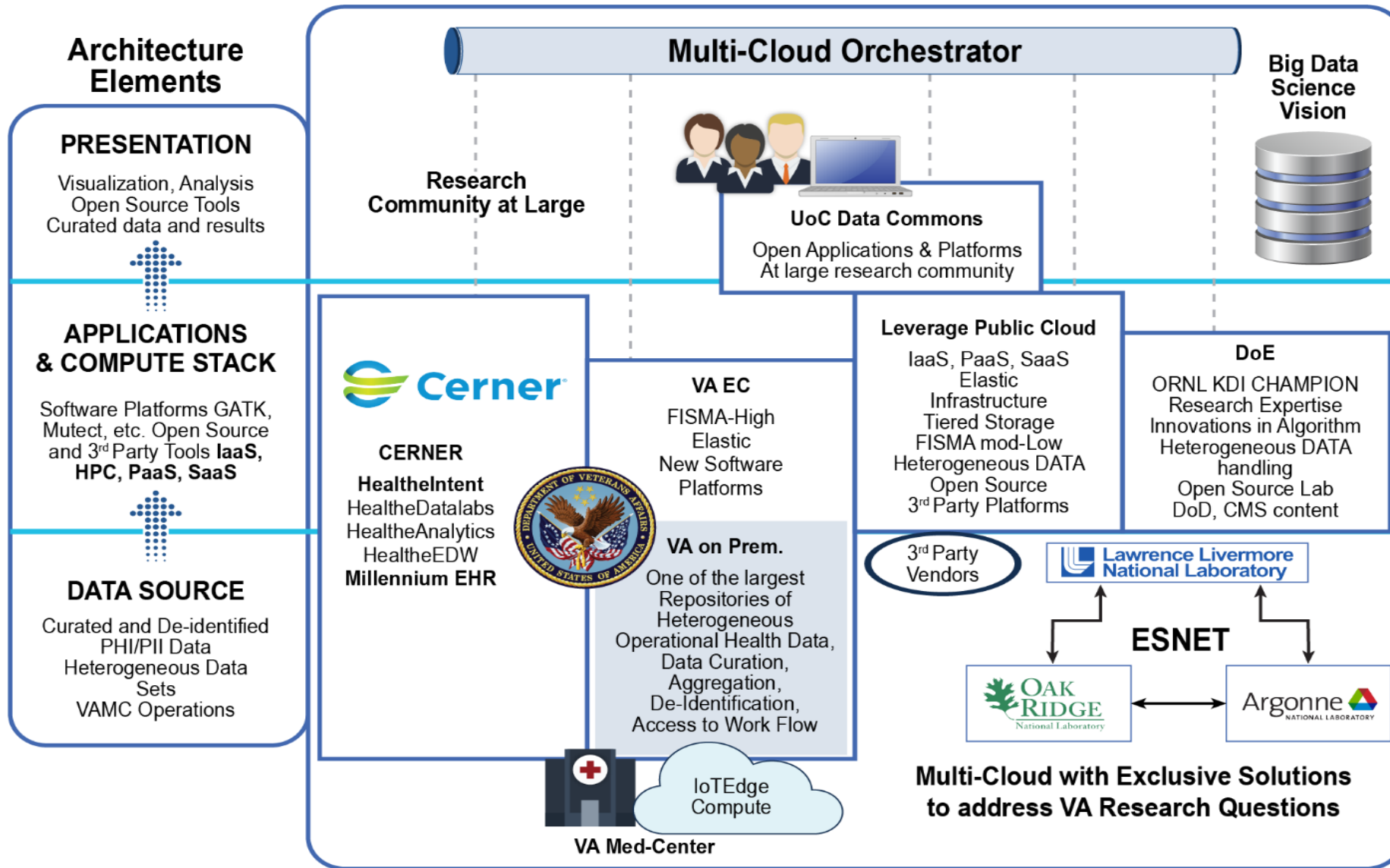
* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Obtain DOE Argonne genomic enclave authority to operate through reciprocity	➤ Q1: Finalize Cerner/EHRM/VA Research strategy including HealthDataLabs and DoD data access requirements	➤ Q1: Complete testing of EHRM/Cerner Analytics Environment	➤ Q1: Modify VA Multi-Cloud System Orchestrator to handle public access to VA Research data requests and interface with VHA ORD IRB COTS solution	➤ Q3: Expand DOE (3 labs) to 600 study marts		
➤ Q2: Obtain DOE Lawrence Livermore enclave for imaging thru reciprocity	➤ Q2: Transfer first domains of deidentified VINCI/CDW data to UoC Data Commons	➤ Q1: Complete resolution of DoD data access restrictions and opening DoD data from Cerner to VA Research through the VA Multi-Cloud System Orchestrator	➤ Q1: VAEC central archive for all VA Research data from VAMC-level systems with linkage to VA Multi-Cloud System Orchestrator	➤ Q3: Expand VAEC to 1000 study marts		
➤ Q2: Establish non-OIT funding for research enclaves within VAEC (VA 6008 revisions required)	➤ Q3: Implement commercial Cloud and study marts within the VA Multi-Cloud Research Environment (5 study marts as pilot/testing)	➤ Q2: Initiate collaborative program management integration for data analytics initiatives within VHA ORD and VHA Office of Health Informatics	➤ Q2: Deploy EHRM/Cerner genomic return of results for pharmacogenomics and precision oncology	➤ Q4: Expand EHRM/Cerner HealthDataLabs to 500 study marts		
➤ Q3: Release V3.0 of VHA ORD IT EA & sync with FY21-25 OIT MYP & VHA Office of Research & Development (ORD) MYP	➤ Q3: Release V4.0 of VHA ORD IT EA and sync with FY22-26 OIT MYP and VHA ORD MYP	➤ Q2: Complete testing of VA Multi-Cloud Orchestrator for Cerner/VAEC/UoC/DOE/VA Legacy environments	➤ Q3: Expand DOE (3 labs) to 400 study marts			
➤ Q4: Obtain VA authority to operate for study marts at the University of Chicago (UoC) Data Commons	➤ Q4: Implement 25 study marts at DOE (3 labs)	➤ Q2: Complete testing of data syndication for merged CDW/Cerner data to DOE	➤ Q3: Release V6.0 of VHA ORD IT EA and sync with FY24-28 OIT MYP and VHA ORD MYP			
➤ Q4: Initiate data de-identification pilot within VAEC	➤ Q4: Expand medical and clinical image analytics pilot (6-9 additional image types) at Livermore National Lab	➤ Q3: Release V5.0 of VHA ORD IT EA and sync with FY23-27 OIT MYP and VHA ORD MYP	➤ Q4: Expand VAEC to 500 study marts			
➤ Q4: Deploy Manual System Orchestrator for VA Multi-Cloud Research Environment	➤ Q4: Begin importing whole genome sequence data from sequencing vendor space in Amazon Web Service to Argonne National Lab	➤ Q4: Complete migration testing of medical/clinical images from Cerner Image Solution to Livermore National Lab				
		➤ Q4: Expand DOE (3 labs) to 100 study marts				
		➤ Q4: Expand VAEC to 100 study marts				

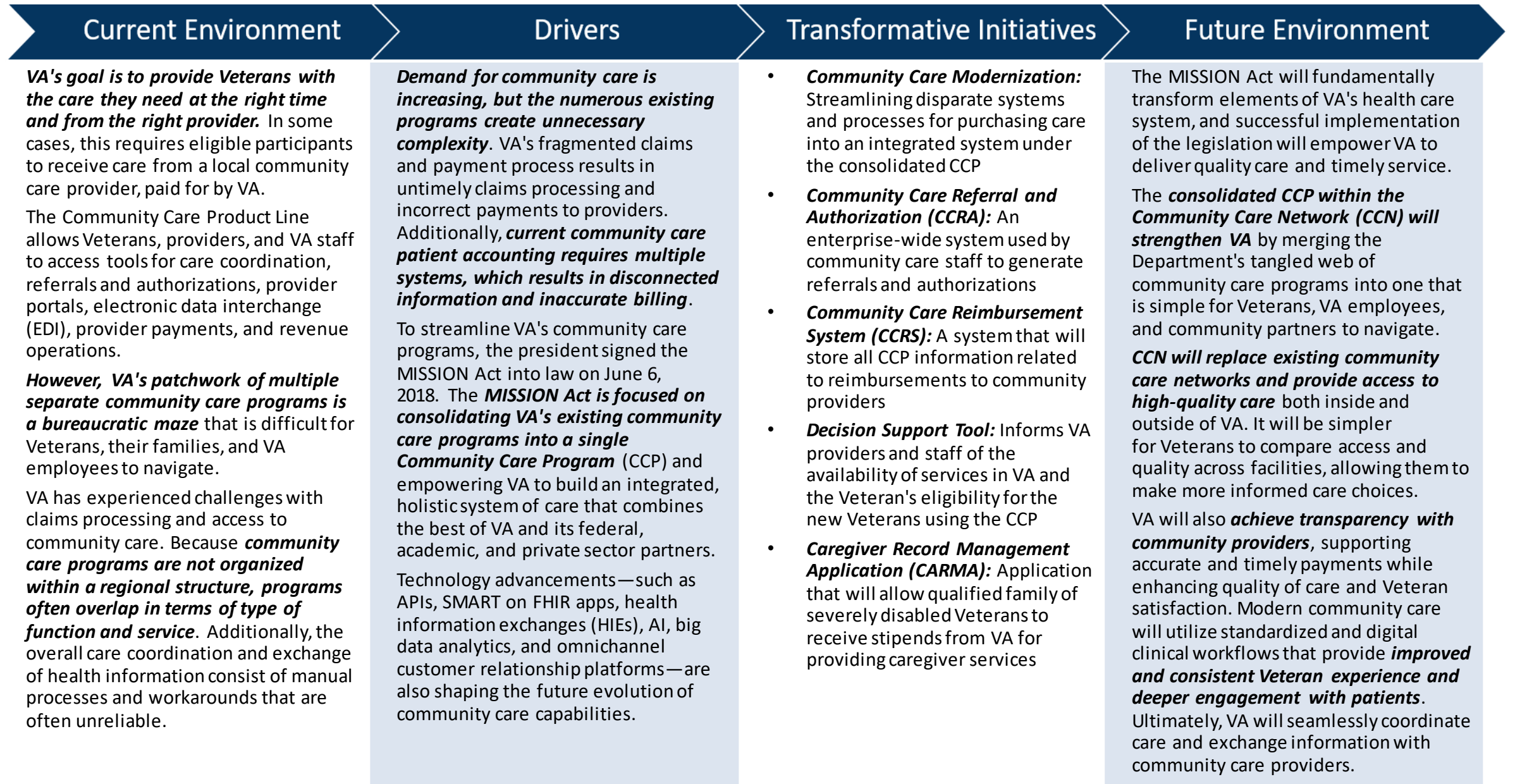
VISION:
The completion of Medical Research, Education, & Population Health milestones will help VA become a learning health system with the ability to make precise diagnostics and deliver accurate, preventative care.



VA's Multi-Cloud Research Environment



Health Services: Community Care





COMMUNITY CARE MILESTONES*

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✓ Funded
➤ Unfunded/
Pre-decisional

* Timelines may shift due to changes
in resources and priorities

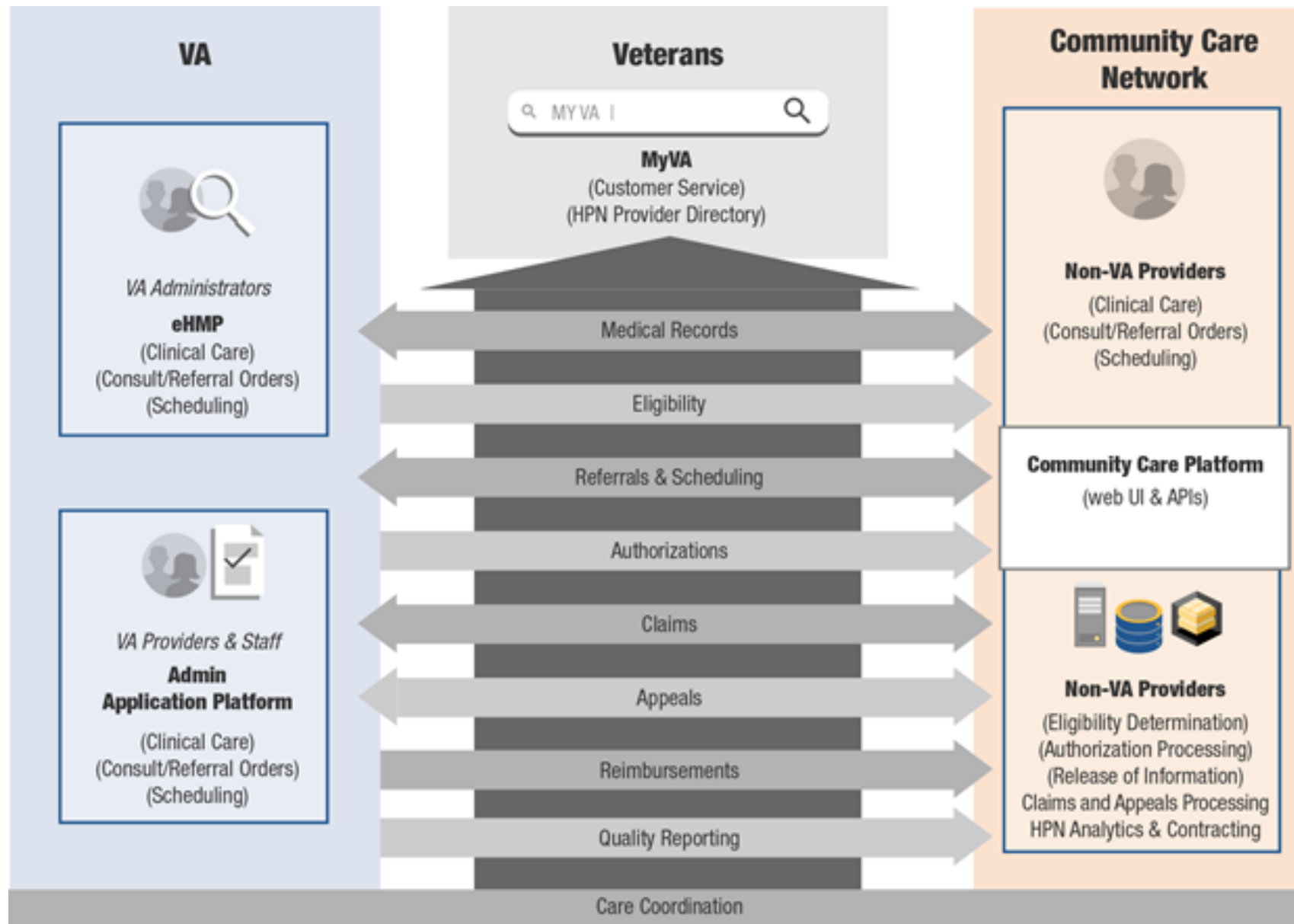
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Deploy EPRS enhancements	➤ Q1: EPRS enhancements					
✓ Q1: Deploy Pharmacy Opioid Monitoring	➤ Q1: Deploy eHX enhancements					
✓ Q1: Deploy CARMA minimum viable product to process, track, and manage Caregiver applications	➤ Q1: Deploy Decision Support Tool Enhancements					
✓ Q1: Deploy CCRA National Release 8.0	➤ Q1: Deploy Consult Tool Box Enhancements					
✓ Q1: Deploy Customer Patient Record System enhancements	➤ Q1: Deploy PPMS Phase 2 updates					
✓ Q1: Deploy Fee Payment Processing System 2.0 & EPRS 2.0	➤ Q2: Deploy HSRM Enhancements					
✓ Q2: Deploy eHX opt out feature	➤ Q2: Deploy CCRS enhancements					
✓ Q2: Deploy EDI Dashboard 1.0, EDI Gateway 2.5, and the Attachment Retrieval System (ARS)						
✓ Q2: Deploy PPMS and Integrated Billing/Accounts Receivable enhancements						
✓ Q3: Deploy EDI Dashboard 2.0 and EDI Gateway 3.0						
✓ Q3: Deploy HSRM CCRA enhancements						
✓ Q3: Complete CARMA UAT to enable legacy systems integration						
✓ Q3: Deploy CCRA National Release 9.0						
✓ Q4: Deploy EDI Dashboard 3.0 to monitor EDI transactions through the EDI Gateway						

VISION:

The completion of Community Care milestones will enable VA to meet the requirements of the MISSION Act and achieve transparency with community providers while enhancing quality of care and Veteran satisfaction.



Community Care Future Environment Conceptual Architecture



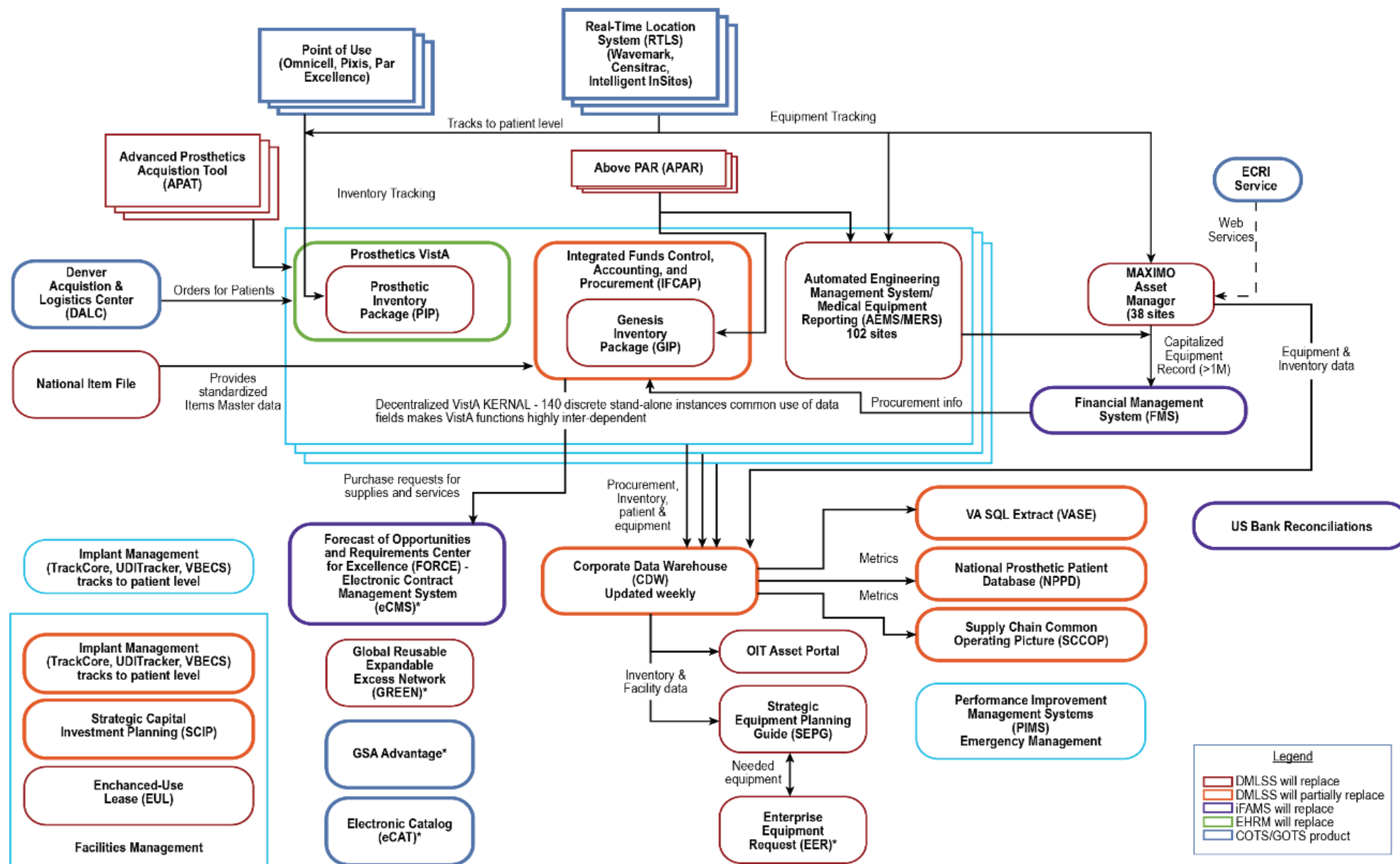


Health Services: Supply Chain Management

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>VA's supply chain delivers clinical care to Veterans by managing the flow of supplies and equipment. Currently, VA's supply chain system is comprised of a set of antiquated legacy and COTS systems with disjointed capabilities. The lack of integration with other VA systems prevents the Department from achieving comprehensive financial, inventory, and supply chain management.</p> <p>The implementation of the current Supply Chain Management modernization efforts is working toward building a lean, efficient supply chain that provides timely access to meaningful data focused on improved patient care and financial outcomes. VA is achieving greater efficiencies by partnering with other government agencies, such as DoD.</p> <p>Due to the coronavirus pandemic, VA experienced the same challenges as other hospitals and hospital systems in the country and around the world. However, as the largest integrated health care system in the country with 170 hospitals, VHA was able to share supplies and personnel resources between sites based on immediate healthcare needs.</p>	<p>Effective management of a supply chain is a major differentiator between high- and low-quality health care systems. Over the past decade, oversight bodies have identified ineffective performance by VA's supply chain. This performance leads to patient safety issues and inefficient resource allocation.</p> <p>In 2019, Secretary Wilkie established four Priorities: Customer Service, MISSION Act Implementation, Electronic Health Record, and Business Systems Transformation. In order to transform business systems, it is necessary to modernize human resource management, finance and acquisition, and supply chain management.</p> <p>VA is coordinating the implementation activities of DMLSS, Cerner EHR, and the Integrated Financial and Acquisition Management System (iFAMS).</p> <p>On March 27, 2019, the Secretary issued a memorandum, <i>Enterprise-Wide Adoption of Defense Medical Logistics Standard Support (DMLSS)</i>, that directed VA to adopt and implement the DoD's DMLSS application as the fully integrated supply chain solution.</p>	<ul style="list-style-type: none">• Defense Medical Logistics Standard Support (DMLSS): An integrated IT logistics system with a comprehensive range of medical material, war reserve material, and facilities management functions• LogiCole: The technical refresh of DMLSS that will be a single, Cloud-based application, which VA will determine its migration to once the application is operational• Supply Chain Master Catalog (SCMC): A Software as a Service (SaaS), Cloud-based catalog that harmonizes all VA contract information to become the single source of truth for all supply chain products available for procurement	<p>VA will pursue a holistic supply chain modernization effort that addresses people, training, processes, data, and automated systems, and it will leverage and strengthen its collaboration with DoD to modernize its supply chain.</p> <p>VA will deploy DMLSS as the supply chain management system across the enterprise starting with VISN 20. The initial roll out of DMLSS encompasses a client server solution, which requires a DMLSS server to be hosted within VA medical facilities. The InterSystems HealthConnect interface to VA legacy financial systems will transition to VAEC-AWS by FY 2021.</p> <p>With the transition to LogiCole in FY 2023, supply chain management activities will pivot away from client server solution and be fully managed in the Cloud. LogiCole's synergies with the EHR and iFAMS will enable improved resource efficiency, responsiveness, regulatory compliance, access to care, quality, and safety when combined with data improvements.</p> <p>Additionally, VA will establish Regional Readiness Centers, geographically distributed to support the four VISN Consortia, to build resiliency into the supply chain to enable VHA to sustain continuous services to Veterans.</p>



Current Environment of VA Supply Chain Management Systems

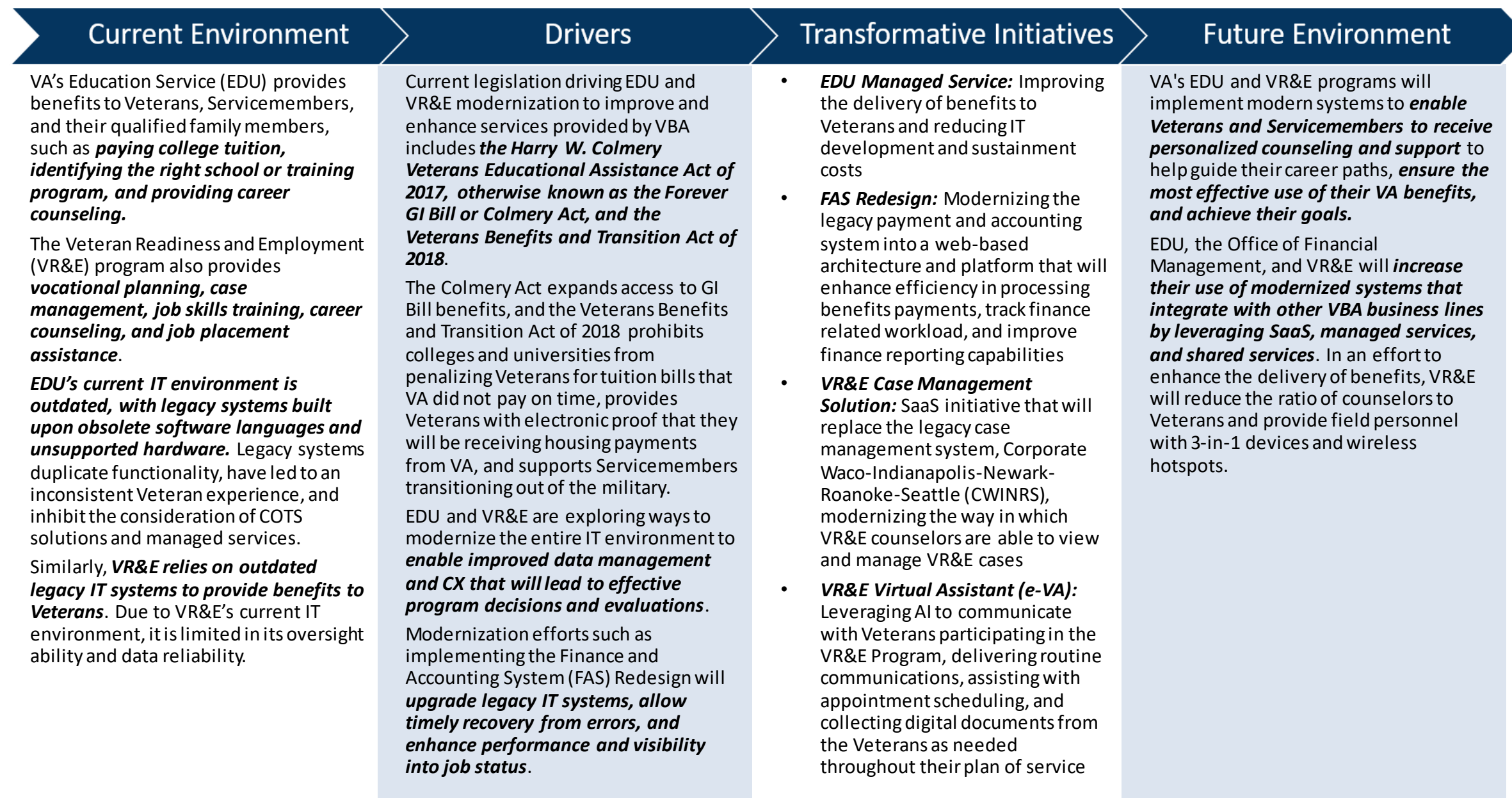


Benefits and Memorial Services Portfolio Overview

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>The Benefits and Memorial Services Portfolio aims to provide technology solutions to support VBA's and NCA's essential programs and services, delivering initiatives for digitization, modernization, automation, and interoperability of their systems and processes to provide Veterans and their families the most efficient and timely service and benefits.</p> <p>The Benefits technology environment is currently built on a multi-systems approach and outdated hardware and software that are becoming increasingly obsolete. Legacy systems often fail to integrate, and even where integration exists, extensive duplication of customer data and functionality leads to non-authoritative data sources and complex system interfaces.</p> <p>In February 2019, OIT successfully released the final software updates necessary to implement the Veterans Appeals Improvement and Modernization Act of 2017 (AMA) functionality. OIT deployed the system enhancements necessary to implement the AMA across three major Benefits systems: Caseflow, Veterans Benefits Management System (VBMS), and Benefits Gateway Services (BGS).</p> <p>Additionally, VA developed the Burial Operations Support System – Enterprise (BOSS-E) as NCA's main IT system to ensure that all aspects of the interment process are completed efficiently and effectively. The legacy system consists of 14 custom-developed modules that are complex and difficult to update.</p>	<p>The VA Priorities and new legislation drive Benefits and Memorial Services modernization. The Harry W. Colmery Veterans Educational Assistance Act of 2017, otherwise known as the Forever GI Bill or Colmery Act, expands access to GI Bill benefits, eliminating the requirement for Veterans to use their Post-9/11 GI Bill benefits within 15 years of their last 90-day period of active duty service. Since the passage of the Forever GI Bill, VA has implemented 28 of the law's 34 provisions, 22 of which require significant changes to VA IT systems.</p> <p>Additionally, the AMA is transforming the benefit claims and appeals process by providing Veterans with new options for seeking review, requiring improved notification of VA decisions, and improving the turnaround time and quality of appeals.</p> <p>Furthermore, NCA's legacy IT systems cause operational inefficiencies and present security risks. Specifically, its legacy case management system, BOSS-E, lacks the functionality of a modern software application. It requires NCA personnel to manually perform scheduling via a text file, which can lead to high hold times and present opportunities for improper scheduling. Therefore, NCA must implement robust IT systems to address current risks, adapt to increasing Veteran interments, and enable efficient delivery of memorial benefits.</p>	<ul style="list-style-type: none">• Education Service (EDU) Managed Service• Finance and Accounting System (FAS) Redesign• VR&E Case Management Solution• Veterans Benefits Management System (VBMS)• National Work Queue (NWQ) Enhancement• Beneficiary Identification and Record Locator Subsystem (BIRLS) Transformation• Guaranty Certainty• Life Insurance Policy Administration Solution (LIPAS)• Electronic Insurance (EIN) Enhancement• Caseflow• Benefits Integration Platform (BIP)• Enterprise Data Warehouse (EDW)• Memorial Benefits Management System (MBMS)• Veterans Legacy Memorial (VLM)	<p>VBA will drive toward application modernization resulting in greater availability of standard platforms, common data sharing, and a standardized approach to software delivery. A suite of strategies will drive VBA's core modernization efforts: leveraging integration of more functionalities into VBMS, increasing utilization of Cloud-based commercial products, enhancing currently integrated systems, standardizing record sharing between federal agencies, and replacing or retiring as many legacy systems as possible.</p> <p>VBA will orient the future environment around a uniform, Veteran-centric approach known as BIP. Built on the technological foundation of VBMS, BIP will consolidate common services and capabilities and operate as VA's unified benefits and services platform.</p> <p>The Board of Veterans' Appeals (Board) will drive toward application enhancements in order to intake decision reviews and process appeals from VBA, VHA, and NCA, improving the timeliness of decisions.</p> <p>NCA will implement MBMS to replace BOSS-E and its legacy applications with a more cohesive, compliant, and functional enterprise platform that seamlessly integrates with VA's systems. MBMS will streamline VA's management and operation of the cemeteries that NCA oversees. It will serve as NCA's system of record once VA migrates all BOSS-E applications to the modern platform.</p>



Benefits and Memorial Services: Education and Veteran Readiness and Employment



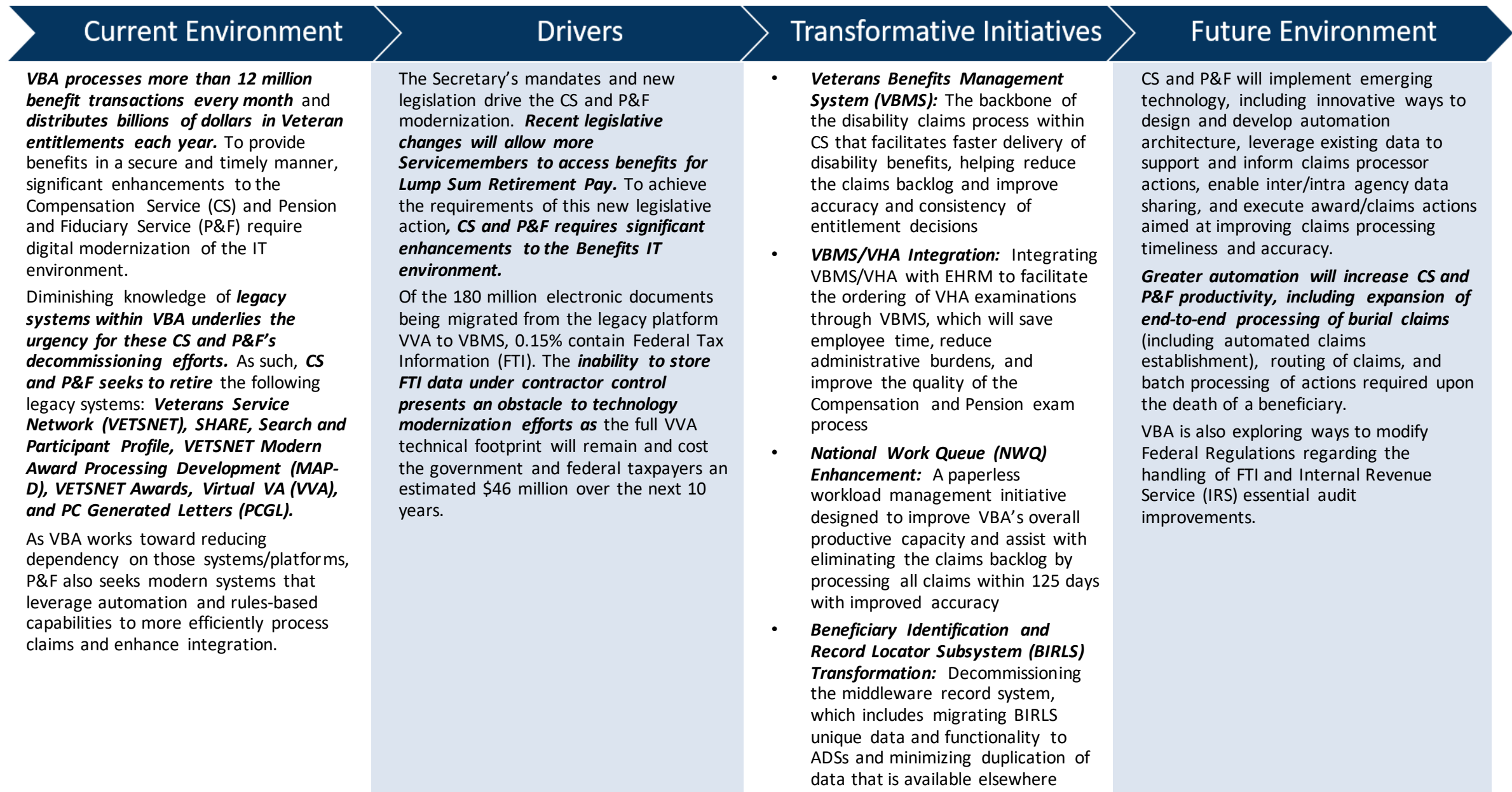


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Pre-decisional

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The completion of Education and Veteran Readiness and Employment milestones will enable Veterans and Servicemembers to receive personalized counseling and support to help guide their career paths, ensure the most effective use of their VA benefits, and achieve their goals.

★ Benefits and Memorial Services: Compensation and Pension

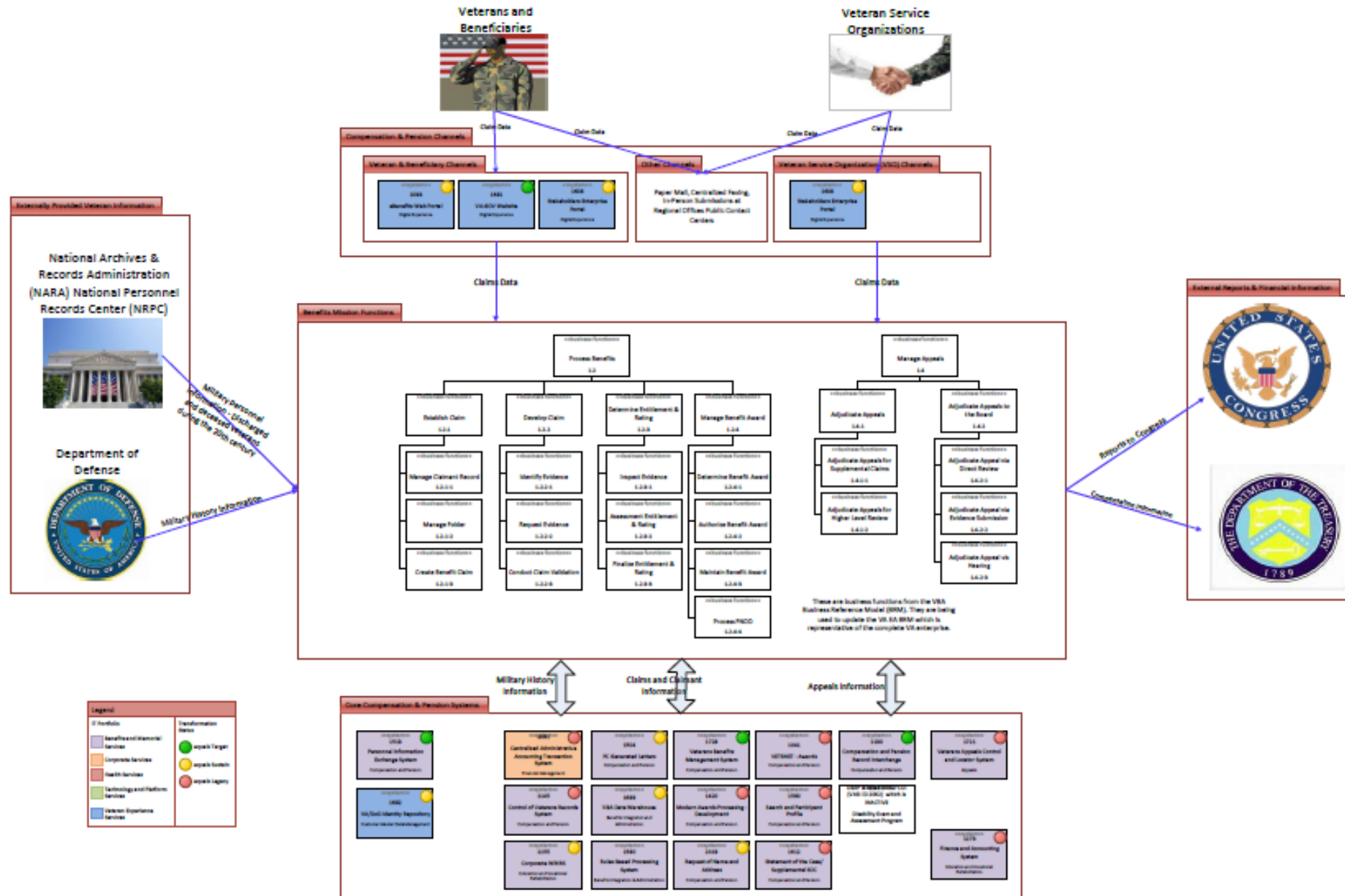




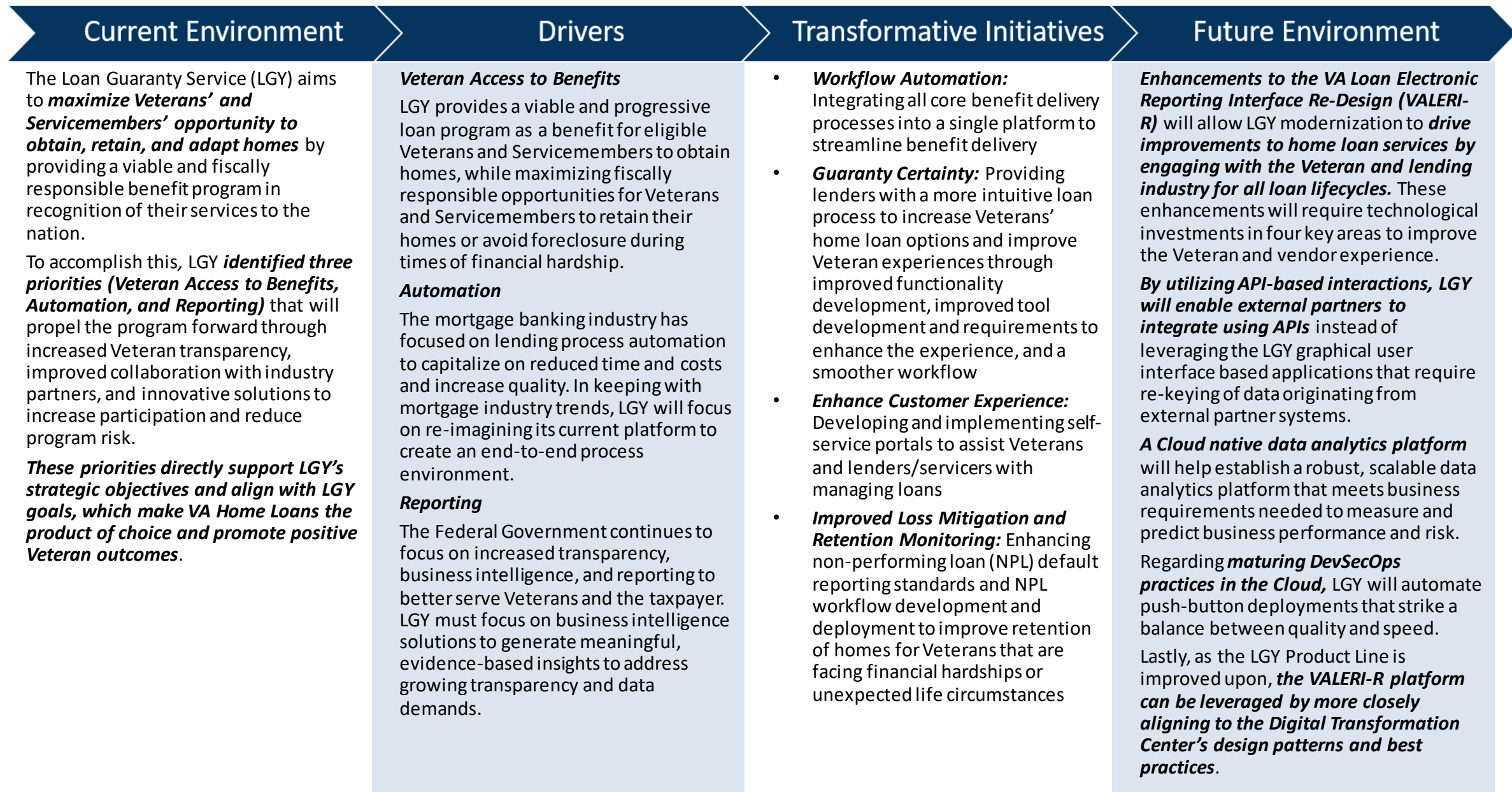
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Pre-decisional

VISION:
The completion of Compensation and Pension milestones will enable greater automation that will increase productivity and expand end-to-end processing, routing, and batch processing of claims.

★ Compensation and Pension Product Line



★ Benefits and Memorial Services: Loan Guaranty





LOAN GUARANTY MILESTONES*

F Y 2020 - F Y 2026

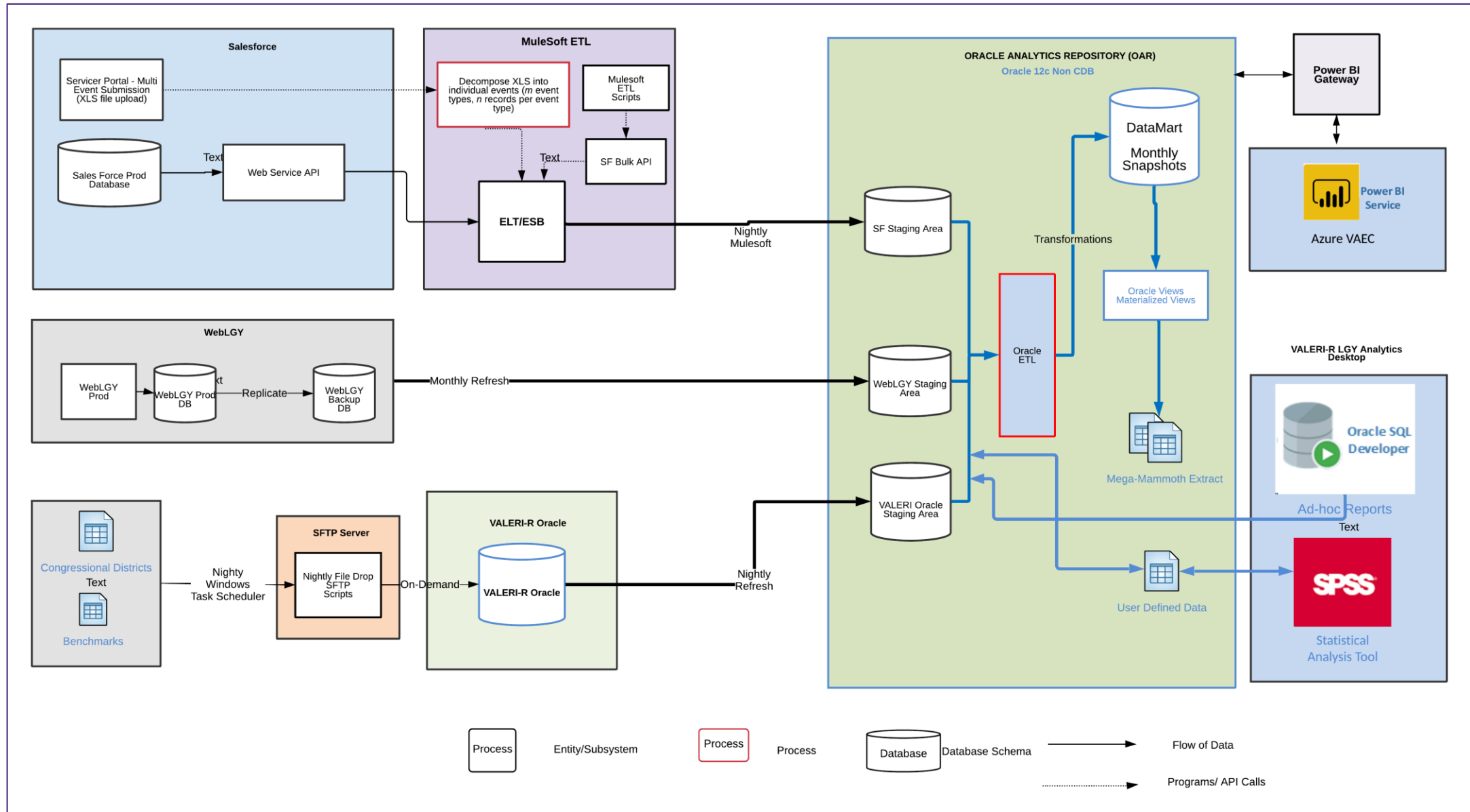
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➤ Unfunded/
Pre-decisional

* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Complete AMS/AVM Project Execution	➤ Q1: Complete LGY Workflow Requirements	➤ Q1: Deploy AQS to Lenders	➤ Q1: Complete Enhanced Scorecard Procurement	➤ Q1: Complete Performance Monitoring Pilot	➤ Q1: Complete Regulation Analysis and Updates	
✓ Q1: Complete AMS/AVM Legacy Data Transition	✓ Q1: Complete DevSecOps Execution (VALERI Environment Enhancements)	➤ Q1: Complete LGY Appraisal Risk Management Pilot	➤ Q1: Complete Performance Monitoring Policy Review and Updates	➤ Q1: Complete Audit Stakeholder Pilot	➤ Q2: Complete Workflow Automation: LGY Workflow Environment Development	
✓ Q1: Define LGY DevSecOps Future Environment	✓ Q1: Complete AQS Integration into VALERI (Phase 2)	➤ Q1: Complete AMS Integration with VA Guaranty Certainty (Phase 1)	➤ Q1: Complete LGY Oversight/ERM Infrastructure Development	➤ Q1: Complete Loss Mitigation Policy Review and Updates	➤ Q3: Complete Industry Partner Performance Monitoring Policy & Pilot	
✓ Q2: Initiate Implementation of LGY DevSecOps Roadmap	✓ Q1: Continue Migration of LGY Suite of Applications to VAEC	➤ Q1: Complete Data Infrastructure Sustainment	➤ Q2: Complete LGY Workflow Environment Development	➤ Q3: Complete CX Stakeholder Pilot	➤ Q4: Completed CX Enhancement Policy Review, Comms., & Pilot	
✓ Q2: Define LGY Technology Stack Rationalization Plan	➤ Q1: Continue Loan Underwriting, Credit Verification, Guaranty Certainty	➤ Q1: Continue Maturing the LGY Data Analytics Platform	➤ Q2: Complete CX Portal Procurement	➤ Q3: Deploy Loan Audit Functionality	➤ Q4: Complete Target Risk-Based Audits RLC, Policy Review, Comms., & Pilot	
✓ Q2: Leverage API Framework from BIP	➤ Q1: Continue Integration with the Lending Industry	➤ Q2: Complete Guaranty Certainty Pilot	➤ Q2: Complete Audit Metrics and Workflow Development	➤ Q3: Complete NPL Default Reporting Standards Review	➤ Q4: Complete Improved Loss Mitigation & Retention Monitoring Policy & Pilot	
✓ Q2: Complete Web LGY/VALERI Workflow Enhancements	➤ Q1: Achieve Agreed Upon Target Well Managed State on the Cloud	✓ Q2: Complete LGY Workflow Procurement	➤ Q2: Complete Audit Industry Communications	➤ Q3: Complete Loss Mitigation Communications	➤ Q4: Complete LGY Oversight/ERM Infrastructure Deployment	
✓ Q2: Complete DevSecOps Procurement	✓ Q3: Complete Cloud Implementation of the Data Analytics Roadmap	➤ Q3: Enhance Scorecard Requirements	➤ Q3: Complete Performance Monitoring Communications	➤ Q4: Complete Performance Monitoring Industry Rollout	➤ Q4: Complete Streamlined System Enhancement	
✓ Q3: Initiate Implementation of Data Analytics Cloud Native Solution	✓ Q3: Complete LGY Transition to VA.gov	➤ Q4: Complete Loan Audit Requirements	➤ Q3: Complete Performance Monitoring Metrics Dev. & Portal Integration	➤ Q4: Complete CX Portal Development		
✓ Q4: Achieve LGY DevSecOps 2020 Environment	✓ Q4: Complete LGY Oversight/ERM Infrastructure Procurement	➤ Q4: Complete Loan Audit Policy Review and Updates	➤ Q4: Complete CX Portal Design and Development	➤ Q4: Complete NPL Workflow Development and Deployment		
✓ Q4: Simplify Gateway Integration and API Orchestration Tools	➤ Q4: Complete Transition of LGY Calls to NCC	➤ Q4: Complete CX Portal Requirements	➤ Q4: Complete CX Industry Communications			
✓ Q4: Complete Bulk Guaranty Pilot	➤ Q4: Operationalize Target Data Analytics Platform	➤ Q4: Complete Servicing and Origination Extract to Lake				
✓ Q4: Complete Program Participate Self-Service	✓ Q4: Continue Maturing DevSecOps Practices	➤ Q4: Complete Guaranty Certainty Industry Rollout				
✓ Q4: Deploy Updated FFLR to Enable Targeted Risk-Based Audits						

VISION:
The completion of Loan Guaranty milestones will enable Veteran-centric digital transformation that drives improvements and enhancements to VA home loan services and products.

★ Loan Guaranty Product Line As-Is Data Architecture - Expanded View



★ Benefits and Memorial Services: Insurance

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>Insurance Service (INS) <i>provides valuable life insurance benefits that extend financial security for a Veteran's family given the extraordinary risks involved in military service.</i></p> <p>INS has an operational need for a modern insurance system that will provide a sustainable solution to improve operations. <i>Its legacy systems are becoming increasingly outdated as they depend on obsolete software languages and hardware that is difficult to support.</i></p> <p>INS currently utilizes two primary legacy systems: Insurance Payment System (IPS) and Veterans Insurance Claims Tracking and Response System (VICTARS). IPS, which is hosted on the mainframe, has an original code base from 1959 while VICTARS, which is built on a client server architecture, has a code base from 1995.</p>	<p>INS legacy systems use <i>outdated equipment and procedures</i> causing difficult transitions for new employees accustomed to modern methodologies. <i>The IPS mainframe-based product utilizes overnight batch processing, which can cause client-server processing delays when errors occur.</i></p> <p>The instability of the IPS legacy system results in processing issues, such as delayed claims processing and incorrect or delayed payments. Legacy INS system instability also leads to difficulty maintaining accurate and timely financial accounting information.</p> <p>Furthermore, INS uses VICTARS, which receives information from IPS daily. <i>Due to the relationship between IPS and VICTARS and the overnight IPS batch processing nature, delays may occur since processing is not real-time and processed work can be rejected at a later point.</i></p>	<ul style="list-style-type: none">• <i>Life Insurance Policy Administration Solution (LIPAS):</i> A solution that will replace the VICTARS and IPS, mainframe and client server applications; modernize business processes; and integrate Veterans' insurance records with the VBMS eFolder and VBA Corporate Database• <i>Electronic Insurance (EIN) Enhancement:</i> Adding self-service capabilities on the EIN website that allow Veterans to check the status of loan requests, securely submit documents, and update beneficiary designations• <i>Legacy System Decommissioning:</i> Transitioning functionality from legacy systems, such as IPS and VICTARS	<p><i>INS will orient the future environment around a uniform, Veteran-centric approach in VAEC using the LIPAS COTS product.</i> LIPAS will support VA's buy-first strategy for services that can be delivered most effectively through managed services or COTS solutions.</p> <p><i>INS will drive toward application modernization resulting in greater availability of standard platforms, common data sharing, and a standardized approach to software delivery.</i></p> <p>A suite of strategies will drive INS's core modernization efforts: leveraging integration of more functionalities; increasing utilization of Cloud-based commercial products; enhancing currently integrated systems; standardizing record sharing between federal agencies, and replacing or retiring legacy systems, such as IPS and VICTARS.</p>

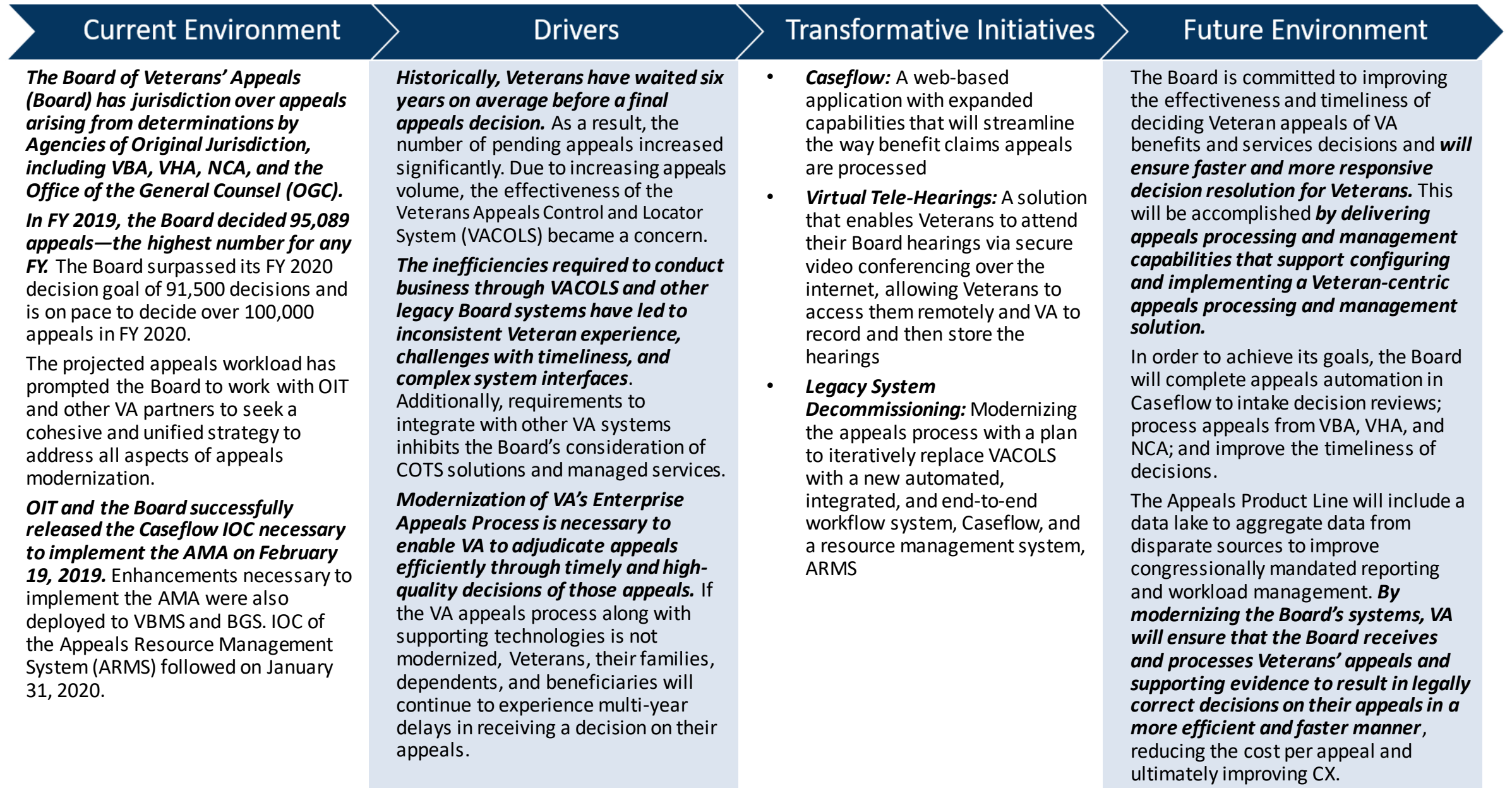


- ✓ Funded
- » Unfunded/
Pre-decisional

VISION:

The completion of Insurance milestones will enable Veteran-centric application modernization that results in greater availability of standard platforms, common data sharing, and standardized interfaces and improves CX.

★ Benefits and Memorial Services: Appeals





APPEALS MILESTONES*

F Y 2020 - F Y 2026

✓ Funded
➤ Unfunded/
Pre-decisional

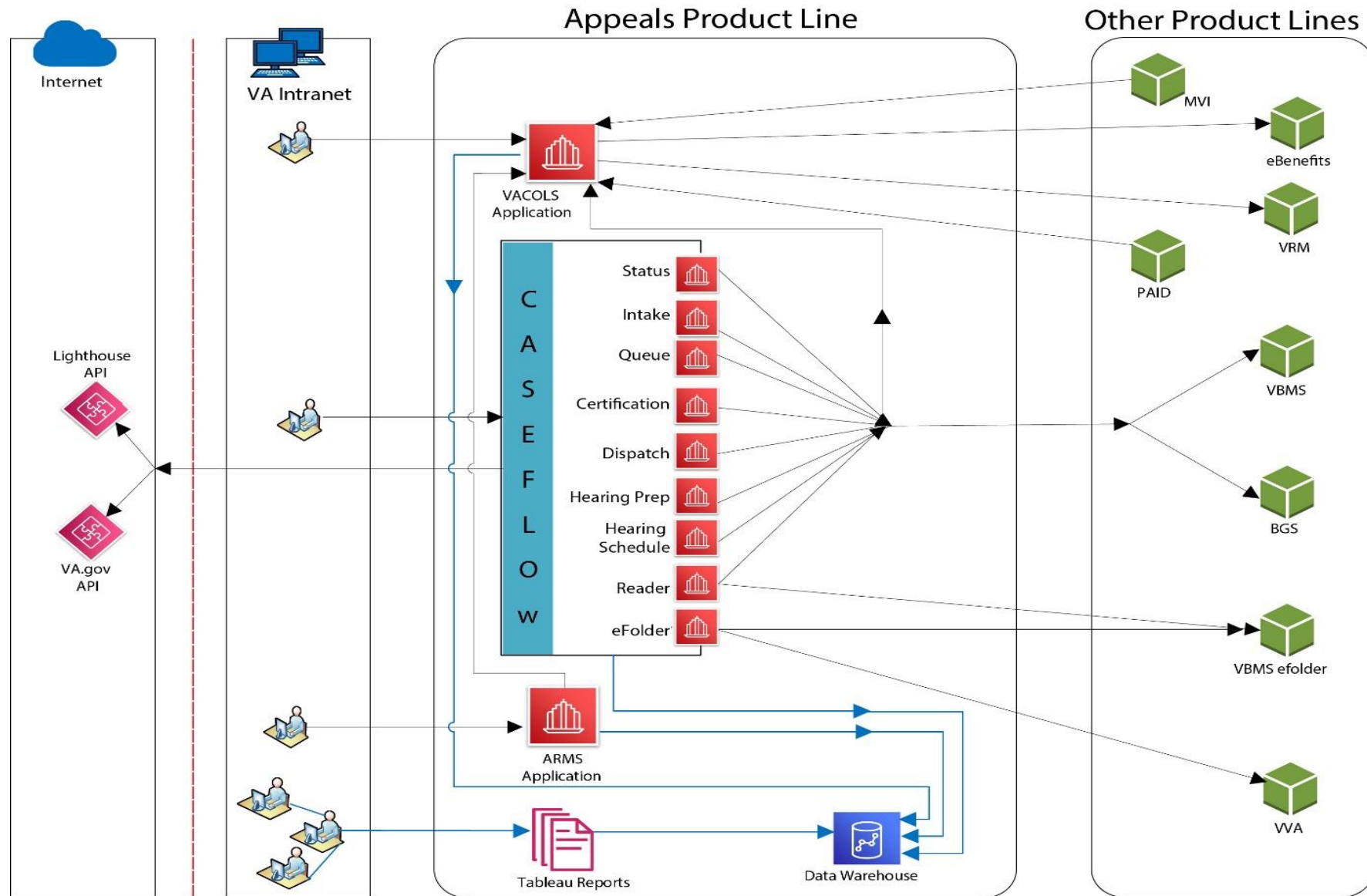
* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Deploy missing ratings integration	✓ Q1: Deploy Caseload Intake functionality to intake all VBA decision reviews and appeals to the Board	➤ Q1: Complete analysis of opportunities to incorporate AI into the Appeals Product Line	➤ Q1: Deploy AI functionality for automating appeals and processing tasks subject to human error or inaccuracy IOC	➤ Q1: Complete 3 of 9 VACOLS decommissioning sub-projects	➤ Q1: Deploy CLE credit processing and Attorney license processing via ARMS FOC	➤ Q1: Complete VACOLS decommissioning
✓ Q1: Deploy Virtual Hearings Generation 2 Recording Functionality and Storage Installation	➤ Q2: Initiate first sub-project to decommission VACOLS	➤ Q3: Initiate development of VHA Enhancements to Caseload	➤ Q2: Deploy IDT replacement FOC	➤ Q2: Deploy Caseload enhancements to achieve Chairman's FY24 goal for decisions issued	➤ Q1: Deploy Board personnel performance monitoring FOC	➤ Q2: Deploy Caseload enhancements to achieve Chairman's FY26 goal for decisions issued
✓ Q2: Complete attorney fees work and finalize async jobs work	➤ Q4: Streamline architecture to include the ability to interface with and read data from external sources to support reporting and business analytic requirements	➤ Q4: Deploy Interactive Design Template (IDT) replacement IOC	➤ Q3: Implement ML to identify important evidence in Reader to enable faster, more accurate decisions for Veterans	➤ Q3: Deploy VHA Decision Reviews FOC	➤ Q2: Complete 3 of the remaining 6 VACOLS decommissioning sub-projects	➤ Q4: Deploy AI functionality to help meet Chairman's FY27 goal for decisions issued
✓ Q2: Deploy functionality for the Board to assign overtime AMA cases and allow IHP-writing, national VSOs to "broker" cases	➤ Q4: Complete the ability to switch appeals from one AMA lane to another upon request by the appellant	➤ Q4: Establish an agreement with strategic partners for Virtual Hearings	➤ Q3: Deploy VHA Decision Reviews IOC	➤ Q4: Deploy AI capability for ML to identify important evidence in Reader to enable faster, more accurate decisions for Veterans FOC	➤ Q2: Deploy Caseload enhancements to achieve Chairman's FY25 goal for decisions issued	
✓ Q2: Complete edit claim labels work		➤ Q4: Complete integration of ARMS with Financial Management System replacement (DBS)	➤ Q4: Deploy AI functionality for automating appeals-processing tasks subject to human error or inaccuracy FOC		➤ Q3: Identify additional AI functionality to help meet Chairman's FY27 goal for decisions issued	
✓ Q2: Initiate Virtual Hearing Generation 2 testing						
✓ Q2: Initiate nationwide deployment of phase 1 Virtual Hearing solution						
✓ Q3: Deploy special case movement – move cases to judge for decision						
✓ Q4: Deploy Appeals Processing Enhancements to establish decision reviews with missing ratings in Corporate Database (Caseload/ Corporate/VBMS Integration)						

VISION:

The completion of Appeals milestones will enable the Board to deliver modern appeals processing and management capabilities that provides more responsive results and improves the effectiveness and timeliness of Veteran appeals for VA benefits.

★ Board of Veterans' Appeals Products



★ Benefits and Memorial Services: Benefits Integration and Administration

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>The Benefits Integration and Administration (BIA) Product Line was formed in late 2019 and focuses on products that provide (1) platform, (2) data and business intelligence, (3) system integration and automation, and (4) administrative capabilities within the benefits and memorial services space.</p> <p>Although there are seven products within the BIA Product Line, BIP is the centerpiece product. BIP is a modern Kubernetes- and Docker-based Platform as a Service (PaaS) that resides within VAEC in the AWS GovCloud environment. It currently hosts VBMS components, MBMS components, and various services (e.g., APIs) within its production cluster.</p> <p>Technology employed by some products within the Product Line is outdated and becoming increasingly obsolete. This includes hardware and software as well as the methods and processes used to develop and deliver the software.</p>	<p>Legacy technology poses a significant risk to VBA and NCA’s ability to provide benefits in a consistent, secure, timely, and cost-effective manner. The inefficiencies that result when conducting business with products with legacy technology lead to inconsistent Veteran experiences, complex system interfaces, data duplication, function duplication, and other issues.</p> <p>Recent legislative changes will expand and simplify access to benefits for Veterans. To achieve the requirements of the new legislation, VBA and NCA must significantly enhance their IT environments. The BIA Product Line will support this effort by helping decommission or refactor systems that employ legacy technology and shift to modern technology and software development methods.</p>	<ul style="list-style-type: none">• Benefits Integration Platform (BIP): A Kubernetes- and Docker-based PaaS tightly coupled with a modern API framework that allows teams supporting VBA and NCA to quickly and easily develop, deploy, scale, and manage container-based applications in a multi-tenant Cloud environment• Corporate Database: A collection of non-Cloud systems that primarily host an Oracle-based database (containing benefits data) and VETSNET, acting as a repository for most benefits related data• Enterprise Data Warehouse (EDW): Leveraging the transactional data of the Corporate Database to enable the production of business intelligence for VBA	<p>BIA will continue to be at the forefront of the modernization and optimization effort within VA’s operating environment. This will be achieved by increasing the utilization of Cloud-based products and services and leveraging human-centered design to develop highly efficient interfaces and systems.</p> <p>BIA will also support VA’s buy-first strategy for products and services that can be delivered most effectively through managed services or COTS solutions. Furthermore, AI, containerization, open source, Infrastructure as Code, and serverless architecture technologies will be leveraged to improve efficiencies, facilitate the retirement of legacy systems, and posture VA for future growth and stability.</p>



BENEFITS INTEGRATION AND ADMINISTRATION MILESTONES*

F Y 2020 - F Y 2026

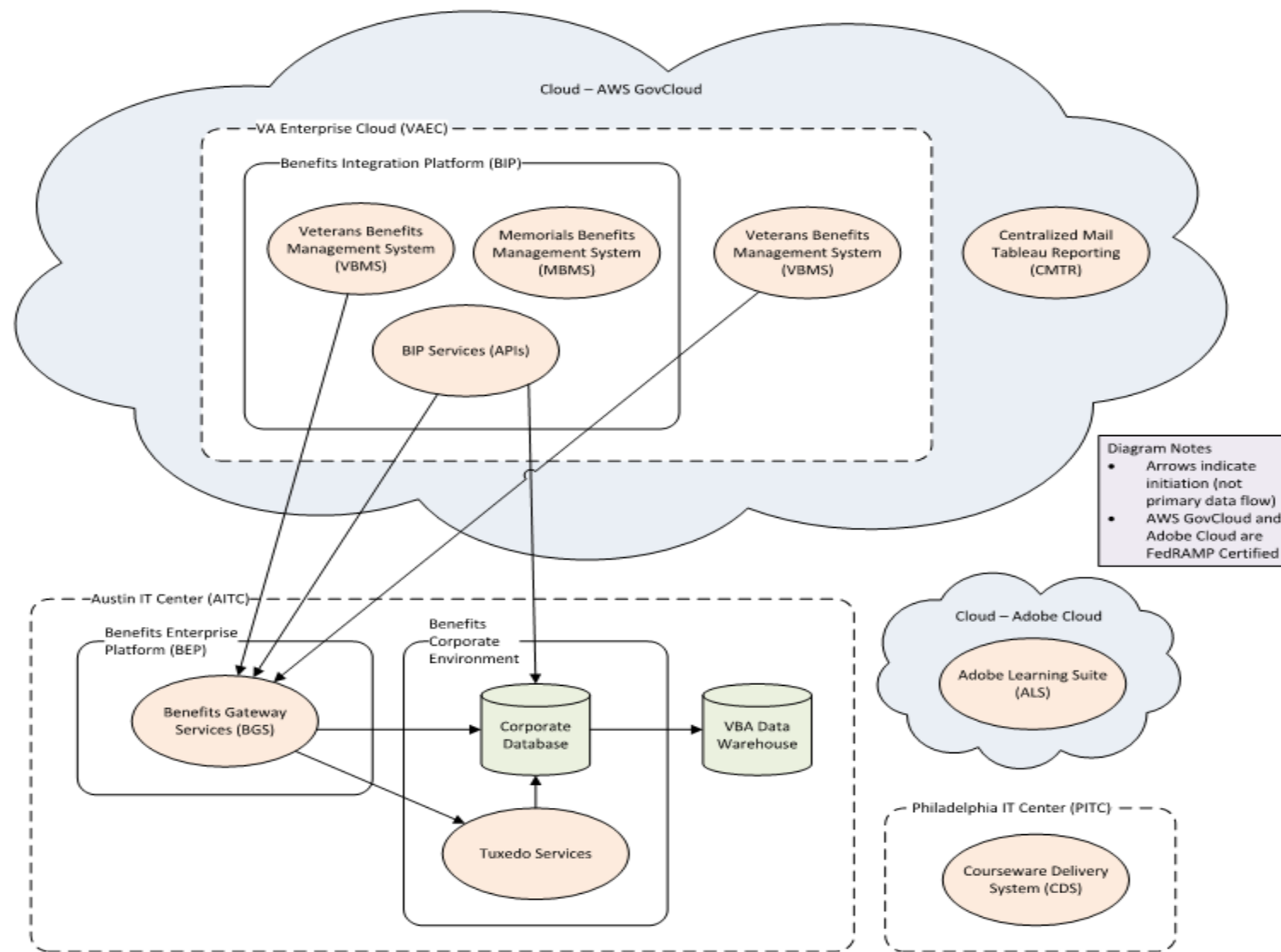
✓ Funded
➤ Unfunded/
Pre-decisional

* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q2: Develop technical approach for migrating all services within Benefits Integration Services (BGS) to BIP	✓ Q1: Complete the upgrade of the VBA Data Warehouse environment to the new Oracle SuperCluster M8	➤ Q1: Explore additional applications of AI for benefits processing within BIP services (APIs)	➤ Q1: Initiate Oracle Tuxedo 12c client upgrades	➤ Q1: Migrate Corporate Database to VAEC	➤ Q1: Explore the feasibility of a dual deployment of BIP within VAEC-Azure	➤ Q1: Explore BIP Serverless Architecture
✓ Q2: Complete Oracle WebLogic 12c upgrades within Benefits Enterprise Platform (BEP)	✓ Q1: Decommission Group 1 software from Corporate Database	➤ Q1: Complete the migration of all services within BGS to BIP	➤ Q1: Upgrade Corporate Database to Oracle Tuxedo 12c	➤ Q3: Migrate BEP to VAEC	➤ Q1: Complete the migration of CDS to VAEC or a full transfer of capabilities to ALS	➤ Q4: Decommission BEP
✓ Q2: Complete the migration of all BIP tenants from v1 to v2	✓ Q2: Complete BMC Control-M upgrades across all Corporate Database environments	➤ Q1: Perform an analysis of the Oracle Tuxedo environment to develop a long-term strategy for sustainment and eventual decommission	➤ Q1: Plan migration of Courseware Delivery System (CDS) to VAEC or full transfer of capabilities to Adobe Learning Suite (ALS)	➤ Q3: Migrate VBA Data Warehouse to VAEC	➤ Q2: Refresh upgrade strategy for Oracle Database/WebLogic/Tuxedo software in the BEP and Corporate Database	
✓ Q2: Deploy an enhanced Claims API in BIP	➤ Q3: Implement data archiving within Corporate Database	➤ Q1: Explore feasibility of migrating Corporate Database to VAEC	➤ Q2: Develop technical approach for implementing a data lake for the Corporate Database	➤ Q3: Implement support for the Experience API (xAPI) within ALS	➤ Q3: Complete integration with VBA assessments, surveys, and Employee Job Task Analysis within ALS	
✓ Q3: Complete Dynatrace and Twistlock implementations within BIP	➤ Q3: Devise strategy for reducing data volumes within VBA Corporate Data Warehouse	➤ Q2: Complete the refracting of the BGS ratings and awards services		➤ Q4: Implement a data lake for Corporate Database		
✓ Q3: Migrate continuous integration tasks from Hudson to Jenkins within BEP	✓ Q4: Upgrade the Oracle Tuxedo and Corporate Database servers to the new Oracle SuperCluster M8	➤ Q2: Explore feasibility of migrating BEP to VAEC		➤ Q4: Devise and execute plan for migrating all tenants off BEP		
✓ Q3: Decommission all BIP v1 infrastructure and components	➤ Q4: Complete the deployment of BIP within VAEC GovCloud East region (required to support expanded disaster recovery capabilities)	➤ Q3: Explore feasibility of migrating VBA Data Warehouse to VAEC				
✓ Q3: Rollout DocGen for general use across the portfolio		➤ Q3: Complete the integration of GitHub and Dimensions CM within SIO				
✓ Q4: Complete the migration of all VBMS components to BIP						
✓ Q4: Support the production launch of the VBA Pension and Fiduciary automation components on BIP						

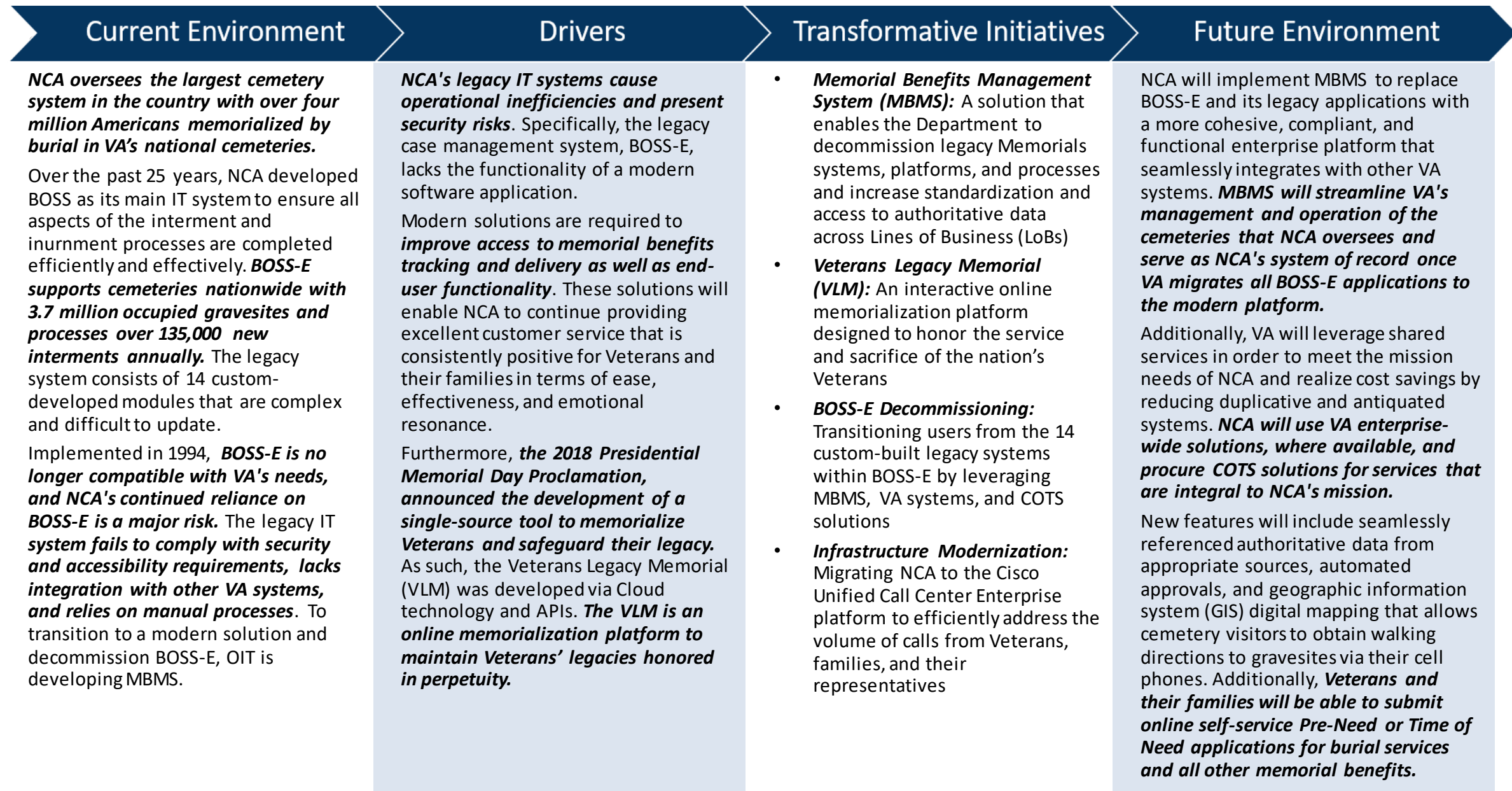
VISION:
The completion of Benefits Integration and Administration milestones will provide advanced technology solutions that improves benefit claims processing, case management, and service delivery.

★ BIA High-Level Architecture





Benefits and Memorial Services: Memorial Benefits and Services





MEMORIAL BENEFITS AND SERVICES MILESTONES*

F Y 2020 - F Y 2026

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➤ Unfunded/
Pre-decisional

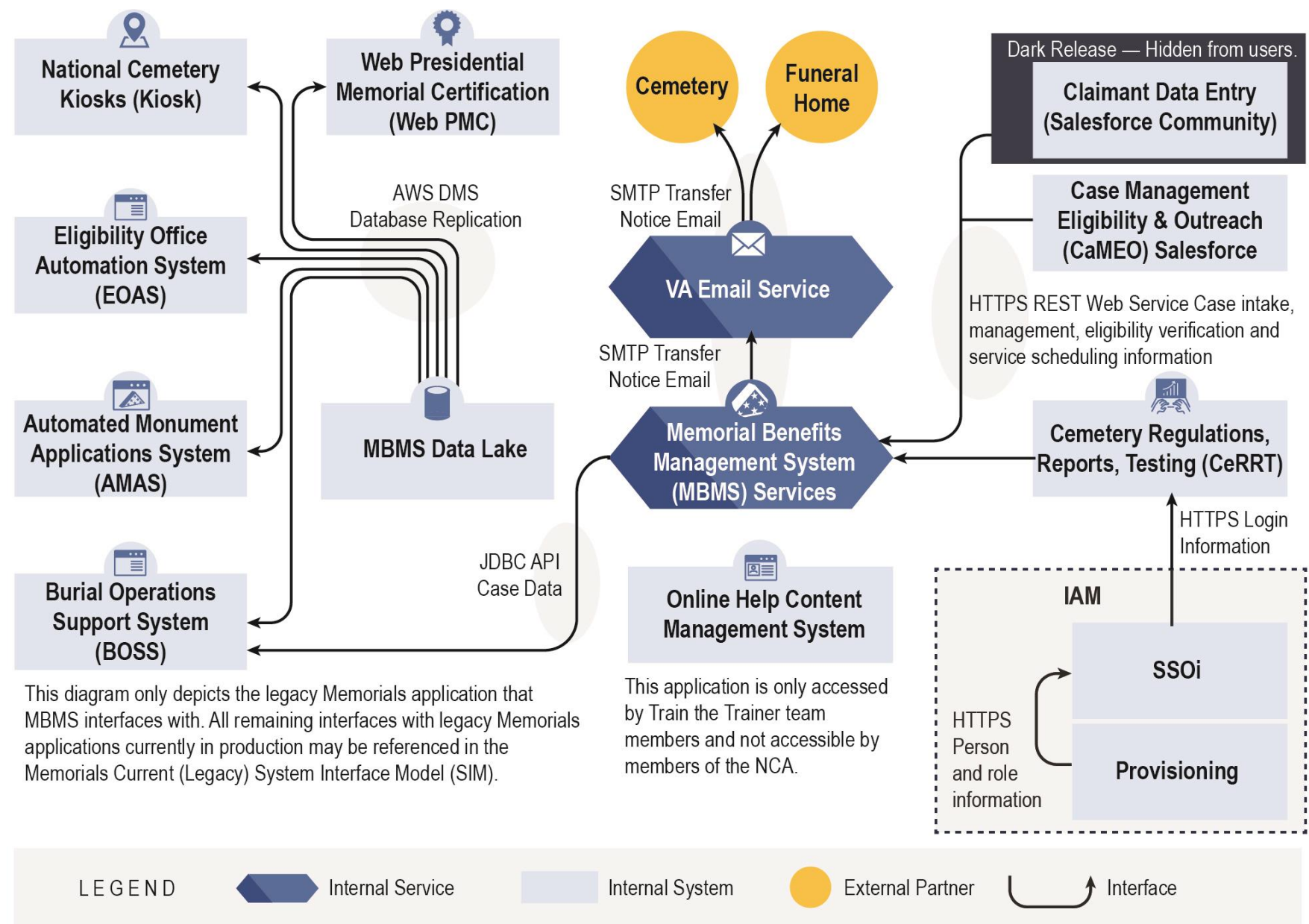
* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Deploy functionality that allows moderated content on VLM	➤ Q1: Deploy MBMS Funeral Home Time of Need case entry pilot	➤ Q2: Deploy MBMS GAR	➤ Q1: Initiate delivery of MBMS Pre-Need enhancements	➤ Q1: Complete VLM Phase 4 Geospatial Digital Renderings	➤ Q2: Decommission BOSS and AMAS Databases	
✓ Q2: Transition VLM Database to Dynamo	➤ Q3: Deliver Eligibility Determination	➤ Q2: Deploy MADSS	➤ Q4: Deploy VLM functionality that enables pre-designation of who serves as custodian for VLM page by Veterans	➤ Q2: Deploy Nationwide Gravesite Locator (NGL)	➤ Q3: Complete MBMS Cemetery Management Modernization	
✓ Q2: Copy legacy data to MBMS Cloud	➤ Q3: Deploy Pre-Need processing and conversion to Time of Need case	➤ Q4: Complete Phase 3 of VLM Geospatial Digital Renderings	➤ Q4: Deploy VLM functionality that enables pre-determination of VLM account page by Veterans	➤ Q2: Deploy Daily Burial Schedule (DBS)	➤ Q4: Deliver New MBMS Self-Service Tools that enables the public to order Presidential Memorial Certificates online	
➤ Q4: Integrate GIS into MBMS	✓ Q3: Stabilize MBMS Platform for National Cemetery Scheduling Office			➤ Q4: Complete Phase 5 of VLM Geospatial Digital Renderings	➤ Q4: Deliver new MBMS Self-Service Tools that enables cemetery visitors to obtain walking directions to gravesites while using their cell phones	
✓ Q4: Integrate Tableau reporting into MBMS	➤ Q4: Initiate MBMS Cemetery Management Modernization				➤ Q4: Deploy MBMS functionality that enables pre-designation of who receives Presidential Memorial Certificates	
✓ Q4: Complete Phase 1 of VLM Geospatial Digital Renderings	➤ Q4: Deploy MBMS Headstone and Marker Ordering				➤ Q4: Decommission all remaining legacy NCA Applications	
	➤ Q4: Complete Phase 2 of VLM Geospatial Digital Renderings					
	➤ Q4: Deploy MBMS functionality that enables Funeral Directors to schedule services					
	➤ Q4: Discontinue use of BOSS legacy database for scheduling					
	✓ Q4: Complete Feith Document conversion					
	➤ Q4: Consolidate Memorial Enterprise Letters into MBMS					

VISION:

The completion of Memorial Benefits and Services milestones will enable VA to leverage shared services in order to meet the mission needs of NCA, realize cost savings, and deploy digital solutions and tools that improve CX.

★ MBMS v2.0 Interim System Interface Model





Corporate Services Portfolio Overview

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>The Corporate Services Portfolio provides IT support to VA's Administrations, Staff Offices, and boards and consists of customer service and back-office operations that are integral to running the business at VA.</p> <p>Currently, the Corporate Services Portfolio relies on multiple outdated and interconnected systems that have outlived their effectiveness. VA's use of obsolete legacy systems and different platforms has created a fragmented environment with unstandardized processes and, as a result, inconsistent CX.</p> <p>However, through Corporate Services initiatives, VA is taking steps to transform its Acquisition and Property Management, Financial Management, Human Capital Management, and SecVA/Congressional/Legal Affairs (SCLA) technology to improve its service to Veterans.</p>	<p>Both internal business imperatives from across VA and external guidance drive Corporate Services modernization efforts. The current Corporate Services technology environment leads to significant costs, operational risks, decreased efficiency, and unpredictable CX.</p> <p>Key legacy systems are extremely outdated, with VA's legacy financial and human resources (HR) systems being over 30 and 50 years old, respectively. These legacy systems do not comply with federal regulations and mandates. VA's modernization strategy within the Corporate Services Portfolio is further guided by the PMA, OMB's mandate regarding financial shared services, and the need to link financial and acquisition systems for effective management of the entire acquisition lifecycle.</p>	<ul style="list-style-type: none">• Knowledge Management System• Veterans Enterprise Management System (VEMS)• Financial Management Business Transformation (FMBT)• Fair Debt: Veteran Debt Processing Enhancements• HR Shared Services• Enterprise HR-Smart Enhancements• Enterprise Talent Development• VA Emergency Alerting and Accountability System (EAAS)• eDiscovery• Government Accountability Office (GAO) Module	<p>VA envisions the Corporate Services Portfolio as an integrated service delivery platform that places the Veteran or employee at the center. Integrated systems will enable cost savings, operational efficiency, and improved access to benefits and services. This will ultimately strengthen the Department's ability to provide care and services to Veterans and enhance CX.</p> <p>VA will employ, and promote further adoption of, shared services within the Corporate Services Portfolio while considering and aligning to the Department's evolving priorities in a fiscally constrained environment.</p> <p>In addition to shared services, the Department will use COTS and government off-the-shelf (GOTS) solutions to provide a modernized experience across functional areas. These solutions will allow VA to replace outdated legacy systems and comply with federal requirements.</p>



Corporate Services: Acquisition and Property Management

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>The current environment of the Acquisition and Property Management Product Line consists of a majority of COTS legacy products, some of which are over 30 years old. These products feature hardware and software that are devoid of the flexibility to readily adapt to the necessary upgrades to improve user experience.</p> <p>VA will ultimately decommission the preponderance of products within the Acquisition and Property Management Product Line and replace their capabilities via Financial Management and Business Transformation's (FMBT) implementation of iFAMS and other systems providing core property management capabilities.</p> <p>This is because it is paramount to link financial systems with acquisition systems to effectively manage the entire acquisition lifecycle. However, there are legacy applications within the Product Line that will remain in service after FMBT and require long-term sustainment and modernization.</p>	<p>The VA Office of Inspector General (OIG) has recommended that the CIO implement a policy to ensure cost-effective utilization of IT equipment, installed software, and services and ensure coordination of acquisitions with affected VA organizations. This will help ensure that VA's operating framework and organizational needs are considered prior to acquisitions.</p> <p>Additionally, the Deputy Secretary of VA is mandated to maintain a listing of VA-certified Veteran-Owned Small Businesses (VOSBs). The VA Office of Small and Disadvantaged Business Utilization is responsible for enabling the Deputy Secretary to meet this mandate, and its related proprietary system is expensive to operate and maintain.</p> <p>Other drivers influencing the Product Line include decommissioning legacy systems in preparation for FMBT and managing contracts in compliance within the Federal Acquisition Regulation (FAR) in a timely and cost-efficient manner.</p>	<ul style="list-style-type: none">• Knowledge Management System: A central point of access for end-to-end acquisition lifecycle information and resources to empower VA's acquisition workforce, resolve inefficiencies, and improve effectiveness of procurement spending in several areas• Veterans Enterprise Management System (VEMS): A COTS product that provides the means to accept Veteran applications for certification as a VOSB, adjudicate applications, and maintain a listing of VOSBs and Service-Disabled Veteran-Owned Businesses (SDVOSBs)• Electronic Contract Management System (eCMS): A portfolio of systems consisting of GOTS and COTS solutions that provides tools and functionality to manage contracts in compliance with the FAR, the VA Acquisition Regulation, and VA acquisition best practices	<p>The Product Line will manage all enterprise application development activities as well as formulate strategy and technical direction, guidance, and policy to ensure that IT resources are acquired and managed for VA in a manner that adheres to various federal laws and regulations.</p> <p>By supporting a small number of highly reliable, flexible, and comprehensive target systems that continuously evolve to support new requirements, the Product Line will be better poised to manage products throughout their lifecycle.</p> <p>By migrating to a DevSecOps environment, VA will be better positioned to integrate its finance and acquisition systems, which will enable the Department to better manage the entire acquisition lifecycle. The Product Line will enhance its vision by incorporating agile practices and human-centered design and will identify interdependencies among systems, allowing for greater advancement in modernization.</p>



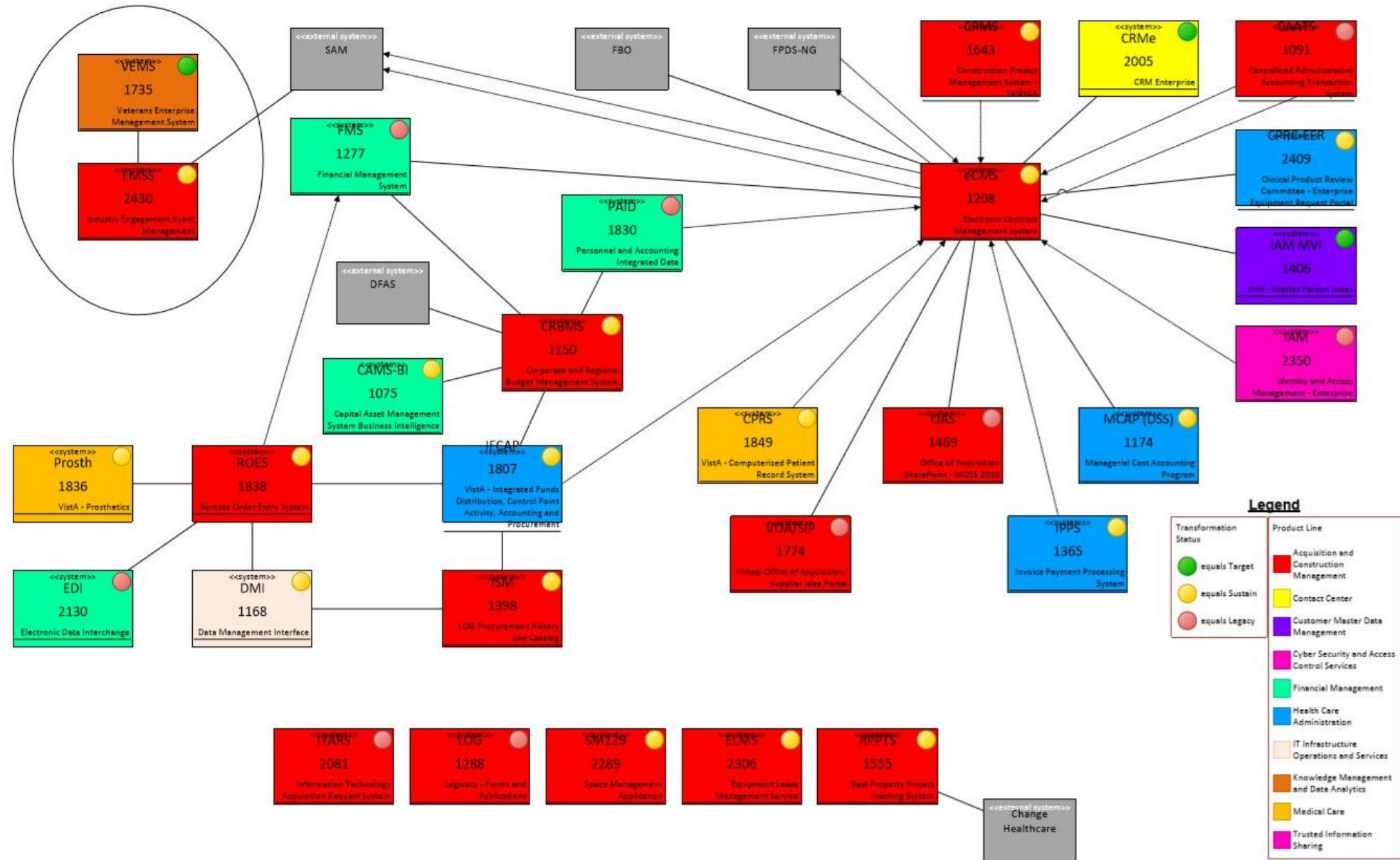
- ✓ Funded
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Pre-decisional

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The completion of Acquisition and Property Management milestones will enable VA to overcome operational risks associated with legacy systems and improve the management of application development activities.



Systems View of the Acquisition and Property Management Product Line





Corporate Services: Financial Management

Current Environment

VA's financial management systems **do not substantially comply with the federal financial management system requirements and the U.S. Government Standard General Ledger at the transaction level**. Its current financial system, the Financial Management System (FMS), **has over 100 primary interfaces with legacy systems, and its hardware and software are no longer updatable**. The legacy software inhibits VA from fixing audit issues, including security and privacy concerns.

VA has cancelled two major efforts to replace FMS since 1999. Prior to VA's FMBT program, the Department's last attempt to implement a new financial system ended in 2010. This has led to a **proliferation of FMS enhancements and workarounds and the development of add-on systems, resulting in a fragmented financial management environment**. To replace FMS, the **FMBT program is implementing iFAMS as VA's modern financial and acquisition management system**.

Similarly, **Veteran debt processing at VA is outdated and fragmented**. The Department currently sends VA debt letters via paper copy and stores them in multiple systems of record to include VVA, VBMS, and VistA. Therefore, VA is working toward **implementing a holistic solution to enhance Veteran debt processing**.

Drivers

VA's legacy financial management system is over 30 years old, and it becomes more challenging to technically and functionally support these legacy applications each year. VA is unable to meet federal financial regulations and mandates, including **the Digital Accountability and Transparency Act of 2014 (DATA Act)**, due to its inability to update legacy code and the lack of integration between the legacy finance and acquisition systems.

Additionally, **OMB Memorandum 13-08, Improving Financial Systems through Shared Services**, directs all executive agencies to use a shared services solution for future modernizations of core accounting or mixed systems. In 2016, VA chose the U.S. Department of Agriculture (USDA) as its Federal Shared Service Provider (FSSP) to guide its migration to an integrated solution. However, in 2017, USDA officially notified VA that it would no longer serve as an FSSP in support of FMBT, prompting VA to solely manage the program.

Legislation driving Veteran debt processing enhancements includes **the Veterans Benefits and Transition Act of 2018** and **the Economic Growth, Regulatory Relief, and Consumer Protection Act**. **PMA CAP Goals 4 (Improving Customer Experience), 9 (Getting Payments Right), and 11 (Improve Management of Major Acquisitions)** also drive VA's financial modernization.

Transformative Initiatives

- **Financial Management Business Transformation (FMBT)**: Implementing iFAMS to replace FMS while using a tailored version of the Scaled Agile Framework for project management to deliver iFAMS functionality in small increments and coordinating with the implementation activities of the Cerner EHR and LogiCole
- **Fair Debt – Veteran Debt Processing Enhancements**: Developing a plan to implement a holistic solution that will 1) track delays and disputes of Veteran debt, 2) notify Veterans of debt management legislative requirements via a common format, and 3) develop a medical database to provide community-care-related Veteran debt to Credit Reporting Agencies in order to address legislative requirements and issues related to debts incurred by Veterans

Future Environment

FMBT will deploy iFAMS as a federally compliant, Cloud-hosted financial and acquisition management solution with transformative business processes and capabilities. iFAMS will interface with the Cerner EHR and LogiCole to modernize VA's financial and acquisition management systems, and it will implement remediation actions related to repeated material weaknesses and compliance findings reported in VA's Agency Financial Report.

The system will **increase the transparency, accuracy, and reliability of financial information across VA**. This will result in improved fiscal accountability to American taxpayers and strengthen the Department's ability to provide care and services to Veterans.

Regarding Veteran debt processing, VA will **provide timely notification to debtors such as Veterans and their families, make debt letters available online, and allow Veterans and beneficiaries the ability to opt-in to receiving correspondence electronically**. It will also provide greater awareness of the debt, including the original debt amount, remaining balance, and payments made. Credit Reporting Agencies will be able to verify whether a debt furnished to them is a Veteran's medical debt, and VA will be able to submit a notice to Veterans when the Department has assumed liability for all or part of their medical debt.



FINANCIAL MANAGEMENT MILESTONES*

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✓ Funded
➤ Unfunded/
Pre-decisional

* Timelines may shift due to changes
in resources and priorities

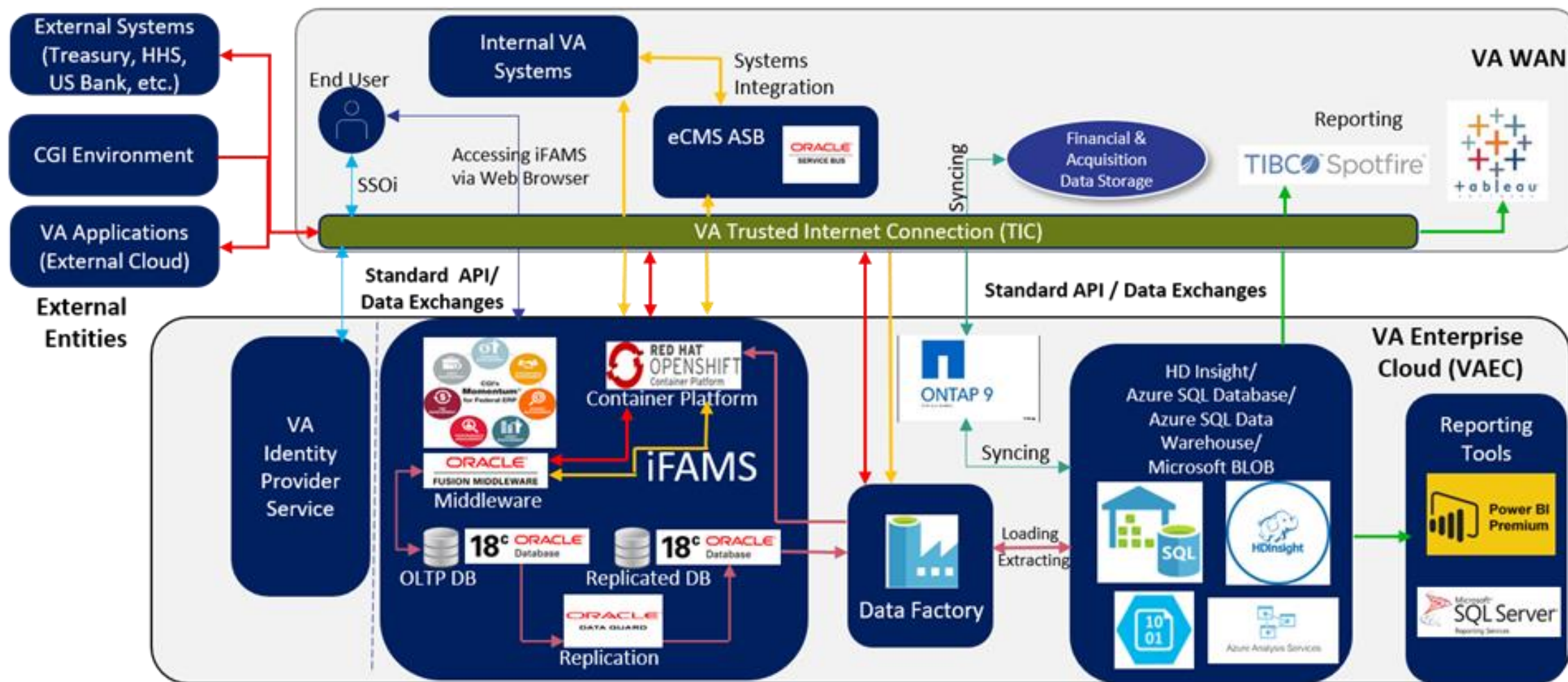
FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q2: FMBT NCA - GS - Value Stream	✓ Q1: FSC Readiness - Integrated Technology - Enhance iFAMS IT Services	➤ Q3: VBA Loan Guaranty Go-Live	➤ Q2: iFAMS-LogiCole Integration Go-Live		➤ Q1: VHA – VHA Central Office (includes HRC and Member Services) Go-Live	➤ Q1: VHA – VISN 8 (FCCPAC) Go-Live
✓ Q2: FMBT NCA - BF2E - Value Stream	✓ Q1: FSC Readiness - New Services Offerings	➤ Q4: Staff Offices Revolving Funds (Franchise Fund, Supply Fund, & Pershing Hall) Go-Live	➤ Q2: Staff Offices – OIT Go-Live		➤ Q2: VBA – C&P, NCA Benefits, Education, and VR&E Go-Live	➤ Q2: VHA – VISN 5, 7, & 6 (MACPAC) Go-Live
✓ Q2: FMBT NCA - P2P - Value Stream	✓ Q1: FMBT NCA - Training Complete		➤ Q2: Staff Offices – the Board, OIG, EHRM, SECVA, OGC, OM, HR&A/ OSP, OEI, OPIA, OCLA, VEO, & OAWP Go-Live		➤ Q2: Deploy iFAMS Acquisition Module for VBA	➤ Q3: VHA – VISN 1, 2, & 4 (NECPAC) Go-Live
✓ Q2: FMBT NCA - B2C/RA Value Stream	✓ Q1: FMBT NCA - CP4 Go/No Go		➤ Q2: Staff Offices – OALC, Major/Minor Construction Go-Live		➤ Q3: VHA – VISN 17, 16, & 9 (MSCPAC) Go-Live	➤ Q4: VHA – VISN 12 & 10 (NCCPAC) Go-Live
✓ Q2: FMBT NCA - Testing - Production Simulation	✓ Q1: FMBT NCA - Go Live		➤ Q2: Deploy iFAMS Acquisition Module for TAC and OIG			
✓ Q2: FMBT NCA - Testing - IST	✓ Q2: FSC Readiness: Adaptive Processes		➤ Q2: Deploy iFAMS Acquisition Module CFM: Major Construction			
➤ Q2: Initiate Fair Debt Initiative	✓ Q2: FMBT NCA - OCM & Comms Complete		➤ Q3: VBA Insurance Go-Live			
✓ Q3: FMBT NCA - R2R - Value Stream	✓ Q2: FMBT NCA - Hypercare Support Complete					
✓ Q3: FMBT NCA - Testing - 508	✓ Q2: FMBT VBA - Product Phase complete					
✓ Q3: FMBT NCA - Testing - UAT	✓ Q2: FMBT VBA - CD2 Go/No Go Go-Live 1					
➤ Q3: Complete Scope Development of Fair Debt Initiative	✓ Q2: FMBT VBA - Go-Live 1					
✓ Q4: FSC Readiness Target State Operating Model VBA-GOE	✓ Q3: FMBT VBA - CD2 Go/No Go Go-Live 2					
✓ Q4: FMBT Interfaces - Value Stream	✓ Q3: FMBT VBA - Go-Live 2					
✓ Q4: FMBT VBA - Test Plan & RTM	✓ Q4: FMBT VBA - Closeout					
➤ Q4: Complete Fair Debt Minimum Viable Product Requirements						

VISION:

The completion of Financial Management milestones will enable the implementation of iFAMS as a federally compliant, Cloud-hosted financial and acquisition management solution that increases transparency, accuracy, and reliability of financial information across VA.



iFAMS High-Level Application and Data View





Corporate Services: Human Capital Management

Current Environment

VA's HR IT environment consists of a set of applications that support the Department's human capital business functions. **These applications exist on disparate platforms and vary in scope, size, complexity, and support mechanisms.** Additionally, many of these business functions are supported by redundant systems across VA Administrations and Staff Offices.

The current HR environment leads to **a significant cost associated with sustaining outdated functionality** that uses different workflow and business processes. It causes **inconsistent and often unreliable data standards and reporting methods as well as increased workload and decreased efficiency of VA's HR practitioners** due to manual processes that require remediating data errors.

In order to address these challenges, Human Resources Information Technology (HRIT) and the Office of Human Resources and Administration (HR&A) have numerous efforts underway including decommissioning PAID, transitioning to shared services with HR-Smart, replacing VA's current Personal Identity Verification (PIV) Card Management System and enterprise talent management solution, and enhancing the VA Emergency Alerting and Accountability System (EAAS).

Drivers

VA's HR modernization efforts are driven by business imperatives from across the Department and external sources. Per its Strategic Plan, **VA is modernizing its human capital management capabilities to empower and enable a diverse, fully staffed, and highly skilled workforce** that consistently delivers world-class services to Veterans and their families.

In 2016, **the U.S. Government Accountability Office (GAO) identified PAID as one of the 10 oldest systems in use in the Federal Government.** PAID has supported many core HR functions for more than 50 years and is antiquated, expensive to maintain, and no longer compliant with federal security requirements.

Additionally, **under the Homeland Security Presidential Directive 12 (HSPD-12), VA is required to issue PIV cards to its employees, contractors, and affiliates.** Its current PIV Card System is nearing the end of its expected lifecycle and encountering technology issues that make it cost-prohibitive to further maintain and enhance.

PMA CAP Goal 3 (Workforce of the Future) and the MISSION Act also guide VA's transformation of its HR capabilities.

Transformative Initiatives

- **HR Shared Services:** Adopting and expanding shared services for HR functions via HR-Smart to realize cost savings and improve internal HR operations and data governance
- **Enterprise HR-Smart Enhancements:** Improving the capabilities of the HR-Smart system by adding manager and employee self-service, workers without compensation (WOC), and manpower functionalities
- **Next Generation PIV (NextGen PIV):** Replacing the current internal PIV Card System with the federal shared service USAccess PIV Card System provided by GSA to substantially improve identity management and security for VA
- **Enterprise Talent Development:** Implementing a new enterprise talent management solution to develop and sustain a high-performing workforce that meets VA's strategic and operational goals and objectives
- **VA Emergency Alerting and Accountability System (EAAS):** A FedRAMP certified SaaS notification system that enables reliable mass communication across a wide range of channels and devices

Future Environment

HRIT will modernize VA's HR systems to provide **cost-effective, standardized, and interoperable HR solutions** to support the strategic management of human capital. The Department will also develop **HR data standards for efficient and reliable data exchange** and leverage existing HR system capabilities to supply innovative core and non-core solutions between shared service resources.

VA will implement **a modern end-to-end system** designed to enter HR data one time and move that data in concert with employees through the HR lifecycle.

The HR transformative initiatives will enable VA to achieve a future environment in which **HRIT operates seamlessly and efficiently to address the business needs of VA Administrations and Staff Offices.** They will also enable cost savings, operational efficiency, enhanced customer service, and improved ability to manage the Human Capital Business Reference Model (HCBRM) functions.

In addition, HRIT envisions a future with a renewed focus on strong governance to accomplish its strategic objectives. Well-defined and executed governance will help VA **eliminate duplicate systems, achieve end-to-end interoperability, and align systems to the HCBRM.**



HUMAN CAPITAL MANAGEMENT MILESTONES*

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➤ Unfunded/
Pre-decisional

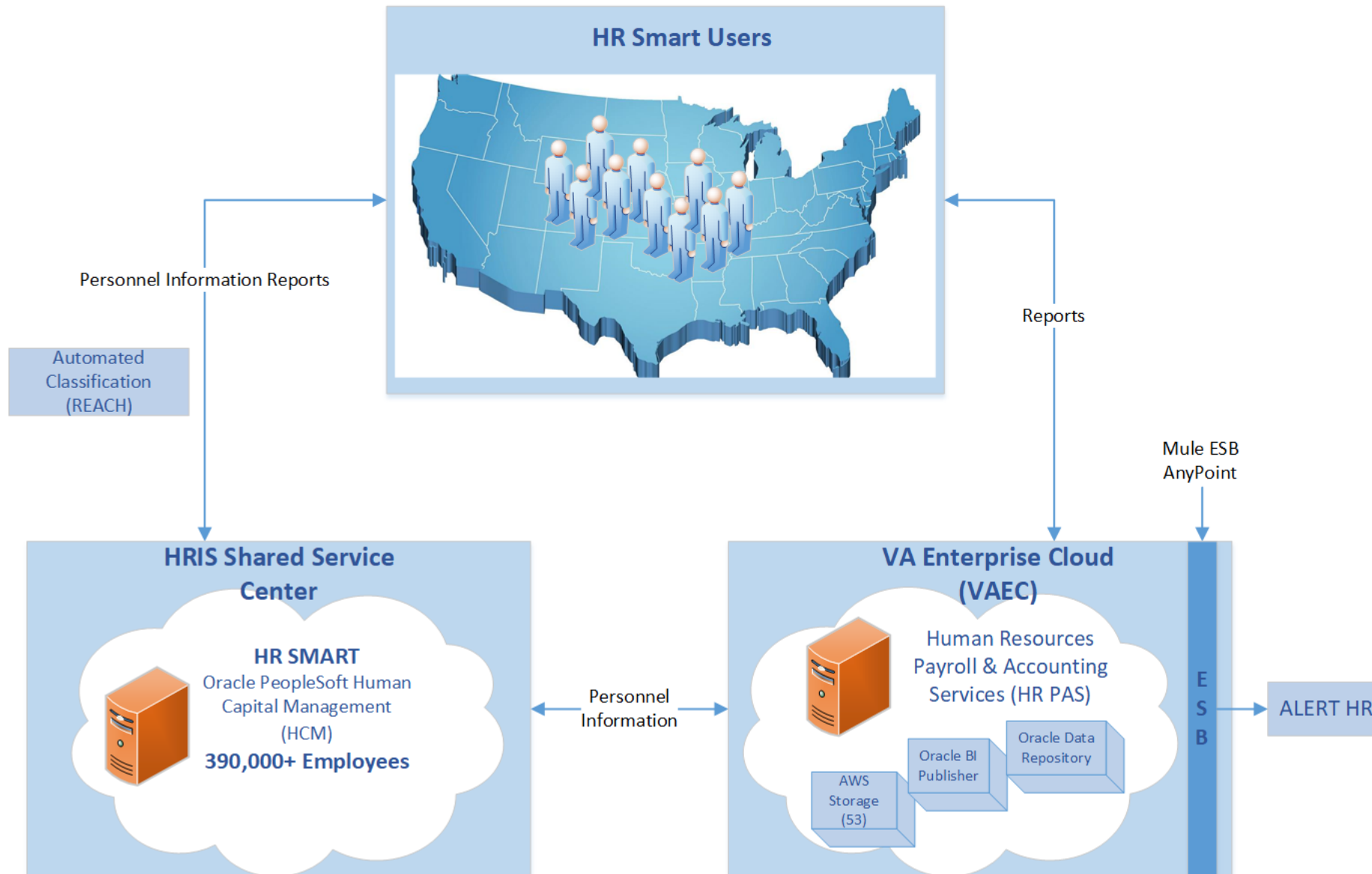
* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Design/Develop WOC Phase 1	✓ Q1: Deploy Automated Classification Hub	➤ Q1: Deploy WOC Phase 3 & 4	➤ Q1: Design/Develop Talent Acquisition	➤ Q1: Design/Develop Employee Benefits	➤ Q1: Deploy Separation & Retirement	➤ Q1: Sustain New Pay
✓ Q1: Design/Develop Manpower Phase 1	➤ Q1: Acquire/Design Employee Self Service Portal	➤ Q1: Sustain Employee Self Service	✓ Q1: Sustain VA EAAS	➤ Q1: Sustain VA EAAS	➤ Q1: Sustain Talent Development	➤ Q1: Sustain VA EAAS
✓ Q1: Deploy USAccess Phase 3	➤ Q1: Deploy Data Cleanse	✓ Q1: Sustain VA EAAS	➤ Q2: Acquire New Pay Solution	➤ Q3: Deploy Talent Development	➤ Q1: Sustain VA EAAS	➤ Q2: Sustain Employee Benefits
✓ Q2: Deploy WOC Phase 1 Proof of Concept	✓ Q1: Deploy WOC Phase 2 (HR Smart)	✓ Q2: Deploy SWIMS FOC	➤ Q3: Deploy Talent Acquisition	➤ Q4: Sustain Time and Attendance	➤ Q2: Deploy Employee Benefits	
✓ Q2: Deploy Manpower Phase 1	✓ Q1: Complete USAccess badge issuance at pilot sites	➤ Q2: Acquire Time and Attendance	➤ Q3: Design/Develop New Pay Phase 1	➤ Q4: Deploy Separation & Retirement	➤ Q4: Sustain Separation and Retirement	
✓ Q2: Deploy Phase 2 NextGen PIV	✓ Q1: Begin Phase 3 deployment of USAccess equipment	➤ Q2: Acquire Talent Acquisition	➤ Q3: Pilot Test Talent Development	➤ Q4: Sustain Talent Acquisition		
✓ Q2: Deploy ALERT-HR FOC	✓ Q2: Acquire WOC Phase 3 & 4 and deploy Manpower Phase 2 (HR Smart)	➤ Q3: Deploy WOC FOC	➤ Q4: Acquire Employee Benefits			
✓ Q2: Deploy FOC MSS (HR Smart)	✓ Q2: Deploy VA EAAS desktop pop-up & mobile app	➤ Q3: Design/Develop Time and Attendance	➤ Q4: Deploy Time and Attendance			
✓ Q3: Acquire WOC Phase 2	➤ Q2: Deploy Phased Roll-out Employee Self Service Portal	➤ Q3: Acquire Separation and Retirement	➤ Q4: Design/Develop Separation & Retirement Phase 2			
✓ Q3: Acquire, Design, and Develop Manpower Phase 2	✓ Q2: Complete PIV PKI certificate migration & deployment of all USAccess mobile equipment	➤ Q3: Acquire Talent Development				
✓ Q4: Design/Develop WOC Phase 2	✓ Q2: Begin USAccess badge issuance to general population	➤ Q4: Sustain WOC				
✓ Q4: Acquire SWIMS & sustain ALERT-HR	✓ Q3: Design/Develop WOC Phase 3 & 4 and SWIMS	➤ Q4: Design/Develop Separation & Retirement Phase 1				
✓ Q4: Design/Develop Enterprise Performance Management Title 5	➤ Q3: Design/Develop Enterprise Performance Management Title 38	➤ Q4: Sustain Enterprise Performance Management Title 5 & 38				
✓ Q4: Begin PIV PKI certificate migration	✓ Q4: Deploy SWIMS IOC & Enterprise Performance Management Title 5	✓ Q4: Sustain SWIMS				
✓ Q4: Begin USAccess badge issuance at 12 pilot sites	➤ Q4: Deploy VA EAAS integration (VA Core Data & Birthright)	✓ Q4: Retire legacy PIV system				
	✓ Q4: Begin legacy PIV system retirement					

VISION:
The completion of Human Capital Management milestones will modernize VA's HR systems in order to provide cost-effective, standardized, and interoperable HR solutions in support of the Department's 500,000+ personnel.

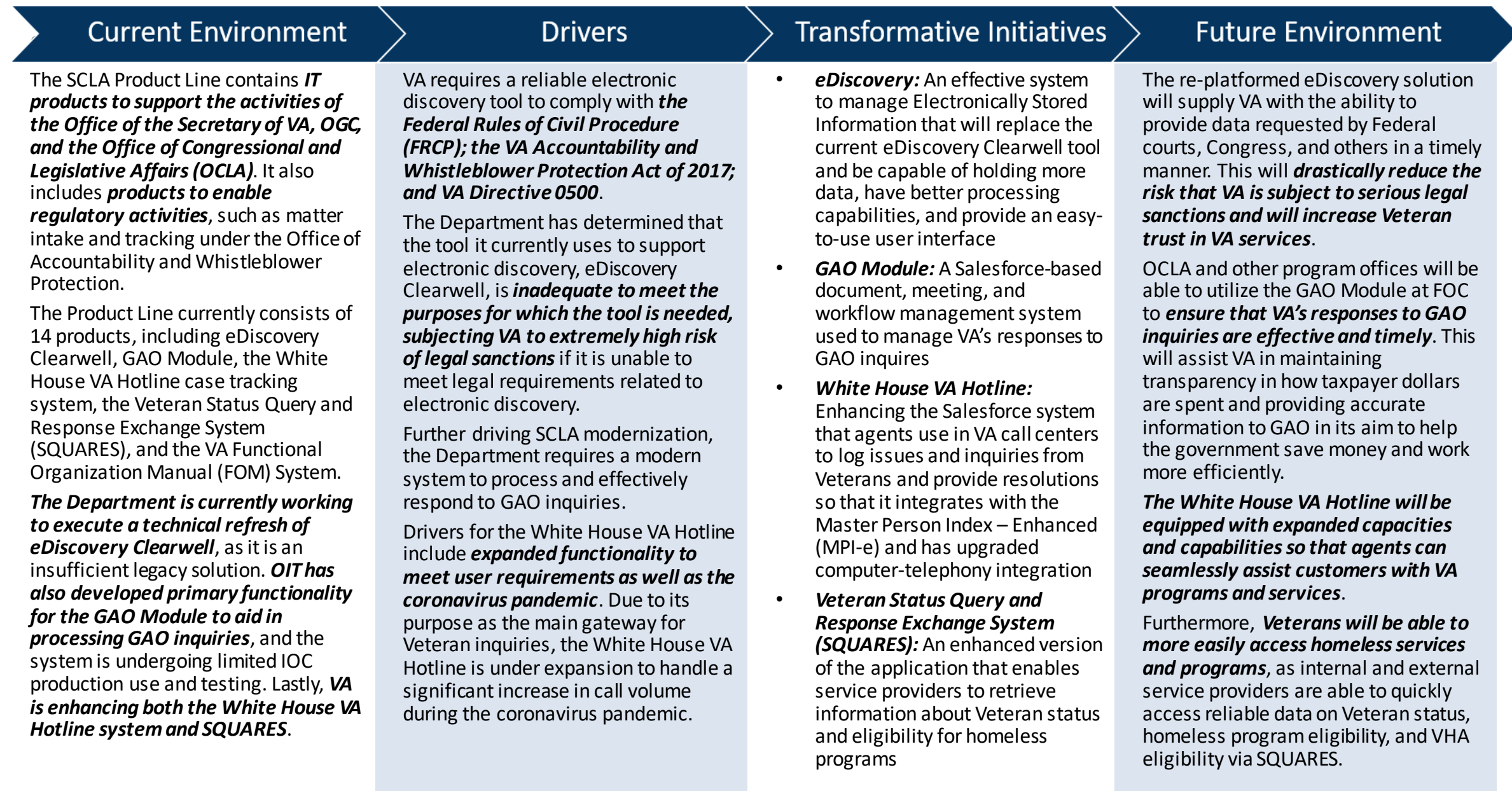


HR and Payroll Future Operational Environment





Corporate Services: SecVA/Congressional/Legal Affairs





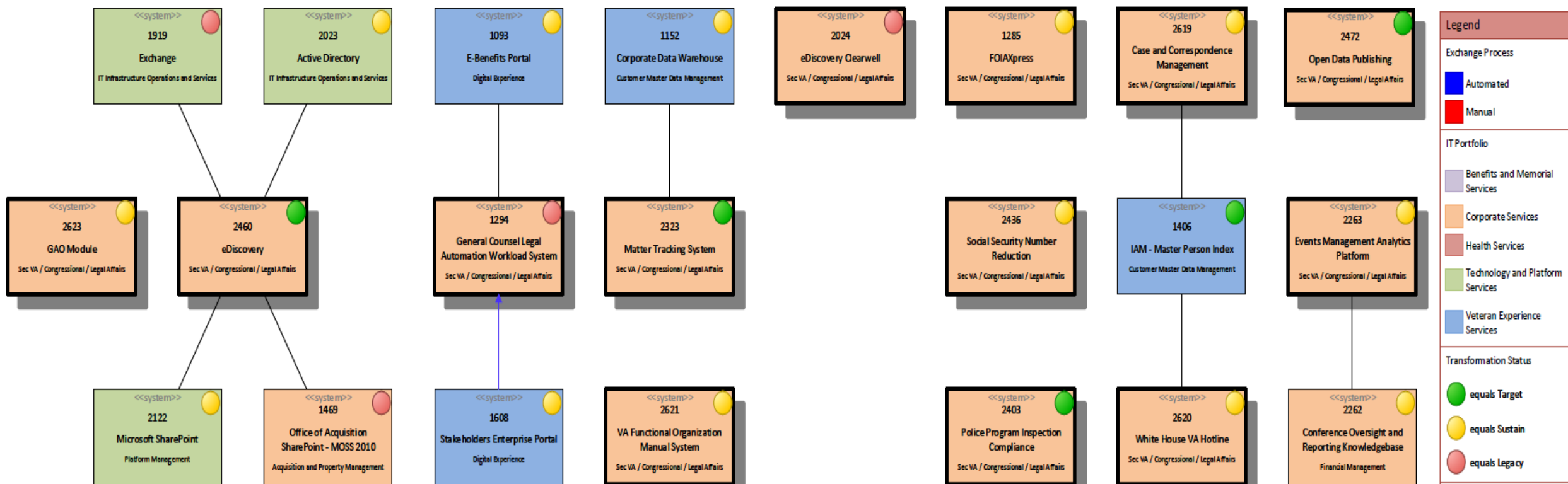
- ✓ Funded
- » Unfunded/
Pre-decisional

* Timelines may shift due to changes in resources and priorities

VISION:
The completion of SecVA/Congressional/
Legal Affairs milestones will enable VA to
effectively organize, maintain, and send
communications both internally and externally
by leveraging a modern, Cloud-based
platform.



Systems View of the SCLA Product Line



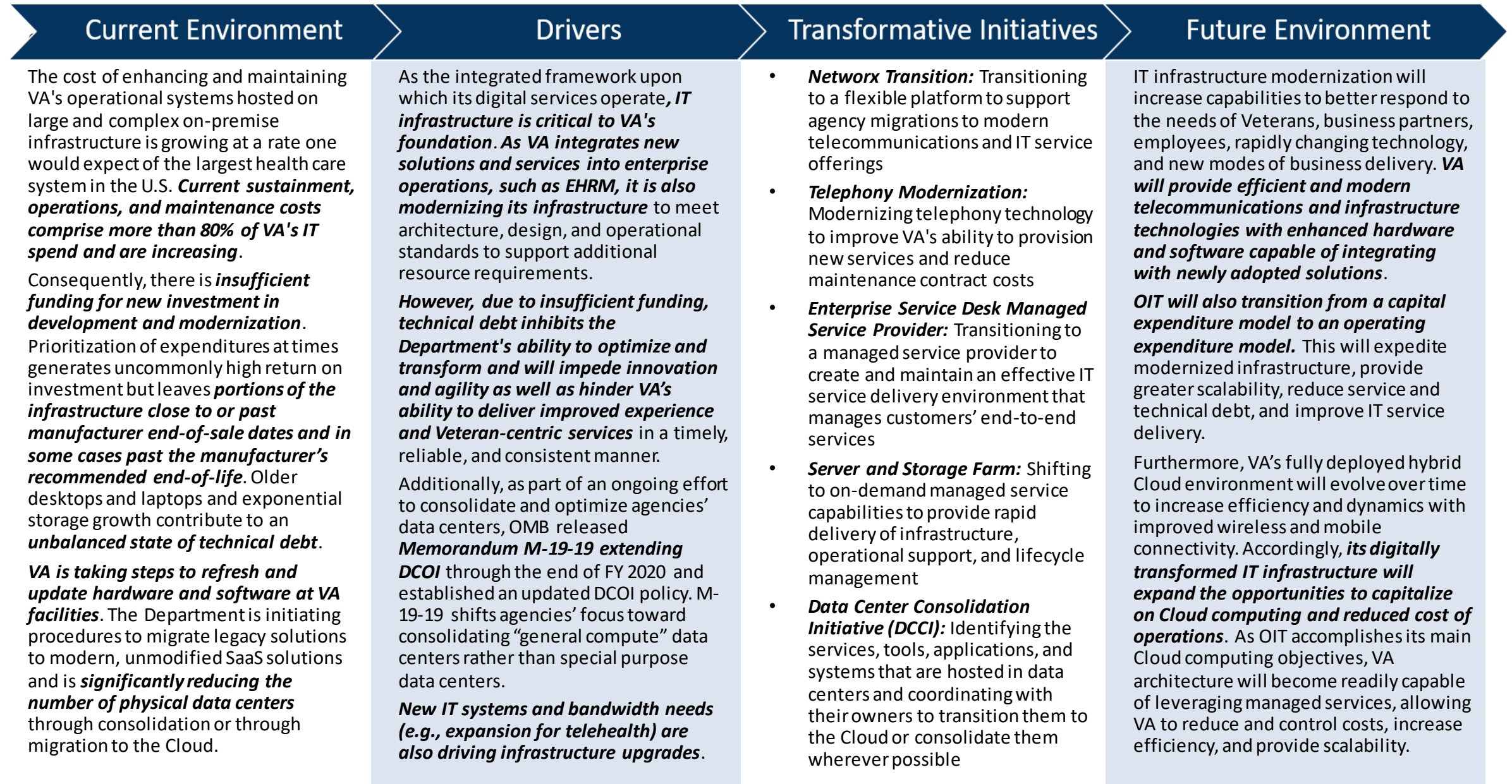


Technology and Platform Services Portfolio Overview

Current Environment	Drivers	Transformative Initiatives	Future Environment
<p>The Technology and Platform Services Portfolio maintains a robust technology infrastructure for the Department to enable the business Portfolios to deliver care and other services to Veterans.</p> <p>VA's technology environment consists of applications with a dedicated infrastructure and a project-centric IT service delivery model.</p> <p>Although the current IT environment is characterized by the need for infrastructure improvements coupled with a collection of legacy and modern technologies, VA has made progress in the direction of its future technology environment.</p>	<p>VA's complex and fragmented technology environment affects the CX of 10 million users.</p> <p>The Department must modernize legacy infrastructure and leverage Cloud technologies to alleviate technical debt, enable interoperability, and ultimately improve customer service and delivery of care.</p> <p>FITARA, the Data Center Optimization Initiative (DCOI), and federal Cloud computing policy guide VA in areas of this effort.</p> <p>Additionally, VA's Enterprise Cybersecurity Strategy (ECSS) findings from GAO and OIG, and federal and VA data security standards direct the Department in safeguarding its infrastructure, systems, and data.</p> <p>The PMA and the MISSION Act also drive modernization within the Portfolio.</p>	<ul style="list-style-type: none">• Networx Transition• Data Center Consolidation Initiative (DCCI)• .gov Cybersecurity Architecture Review (.govCAR) Program• Identity and Access Management (IAM)• Veterans Data Integration and Federation Enterprise Platform (VDIF-EP)• Lighthouse: VA's API Management Platform• Hosting and Provisioning (Integrated Architecture Multi-Cloud Strategies)• VA Enterprise Cloud (VAEC)	<p>The Technology and Platform Services Portfolio will supply efficient and modern telecommunications and infrastructure technologies that are capable of integrating with newly adopted solutions.</p> <p>VA will achieve highly reliable and available infrastructure to develop and host Cloud services and applications across the Department. Data standardization and synchronization will enable seamless information sharing and reuse for collaboration and research.</p> <p>Additionally, the Department will continue to evolve its Enterprise Cybersecurity Program (ECSP) to protect Veteran information and VA data, systems, and infrastructure as well as maintain a cyberspace ecosystem that is resilient to threats.</p>



Technology and Platform Services: IT Infrastructure Operations and Services





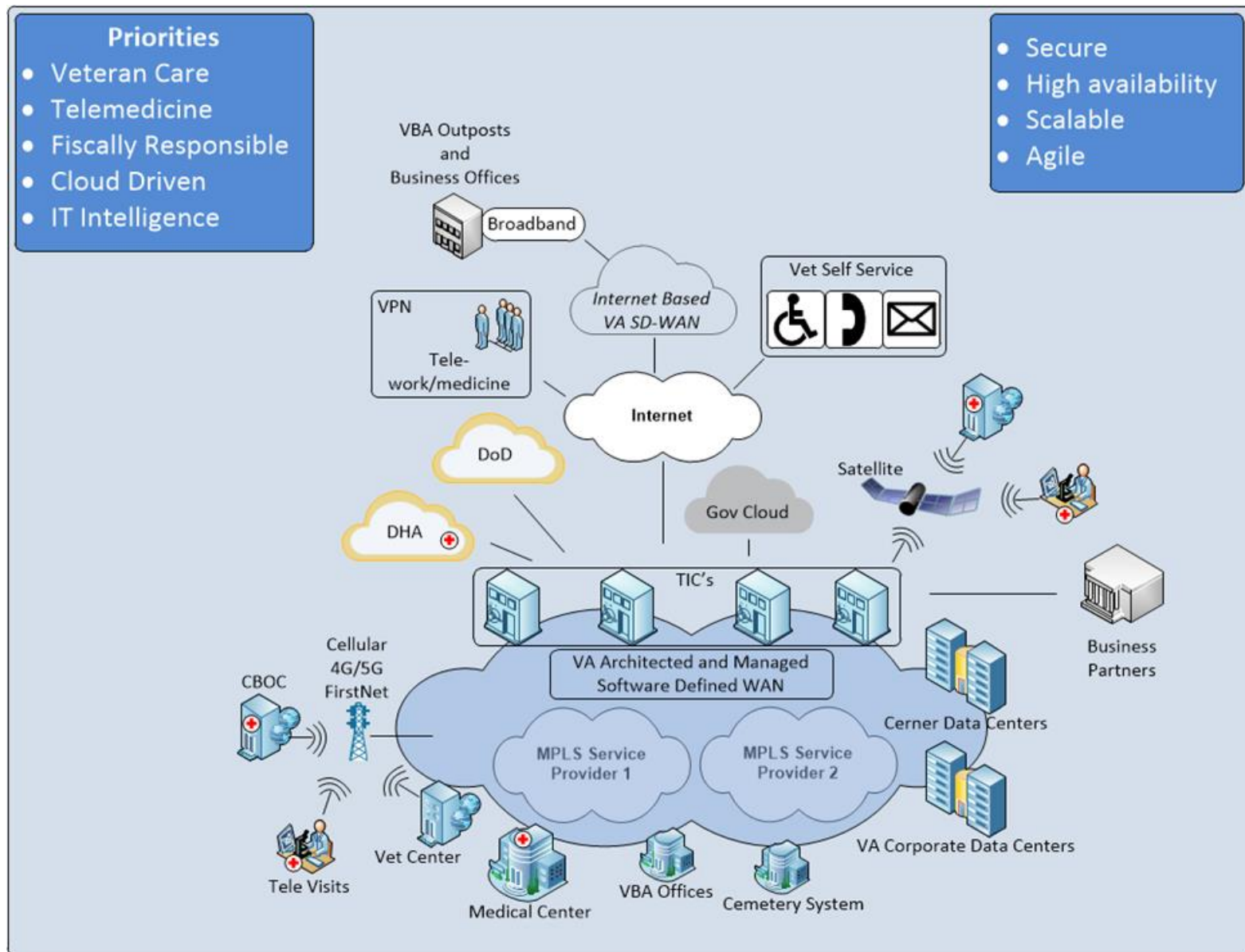
- ✓ Funded
- Unfunded/
Pre-decisional

* Timelines may shift due to changes in resources and priorities

VISION:
The completion of IT Infrastructure Operations and Services milestones will provide modern telecommunications and efficient infrastructure technologies that will increase VA's capabilities to better respond to the needs of Veterans and employees.

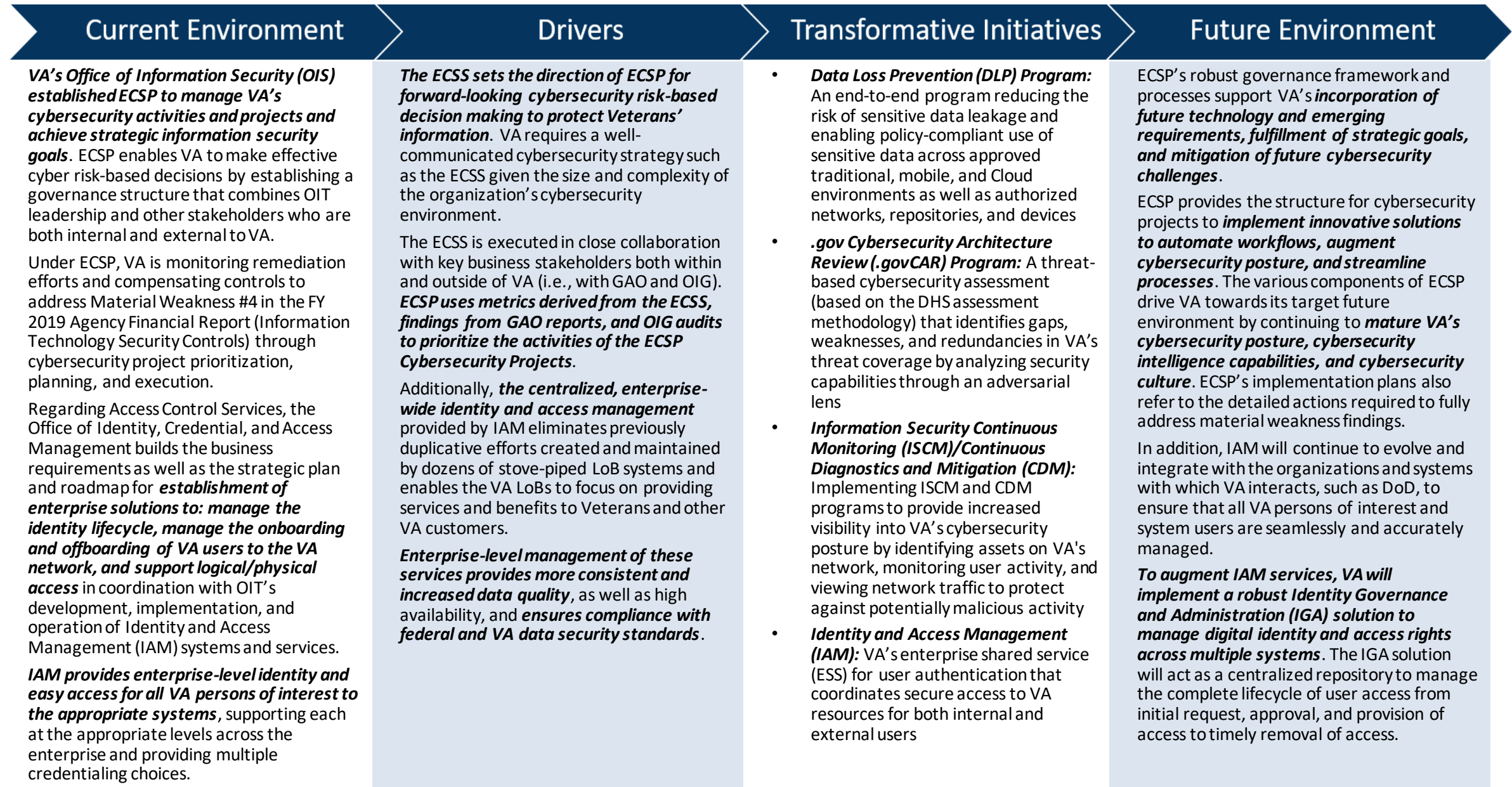


Proposed Future Enterprise Network and Infrastructure





Technology and Platform Services: Cybersecurity and Access Control Services





CYBERSECURITY AND ACCESS CONTROL MILESTONES*

F Y 2020 - F Y 2026

✓ Funded
➤ Unfunded/
Pre-decisional

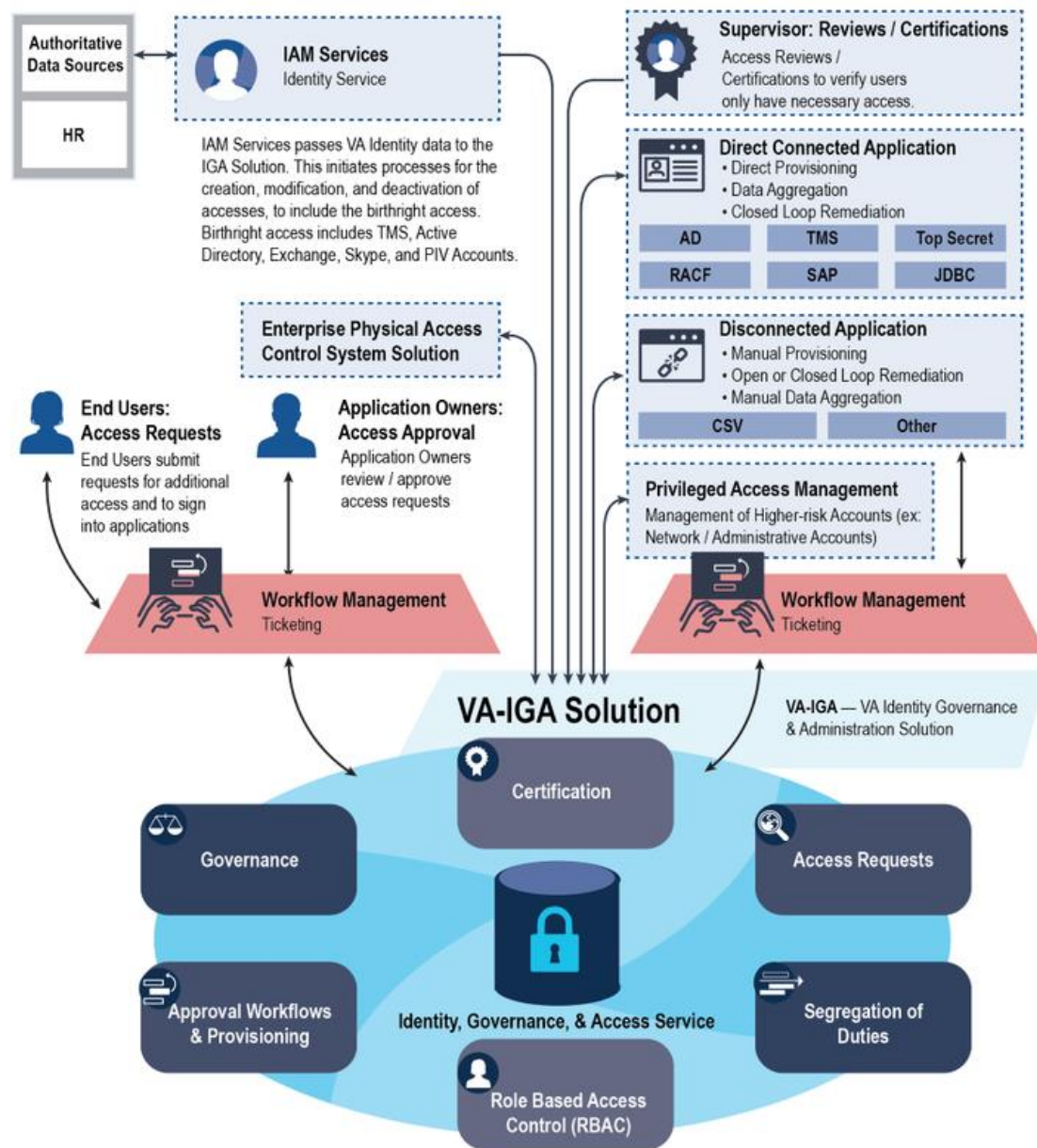
* Timelines may shift due to changes in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q2: Deploy Employee Onboarding enhancements to IAM	➤ Q1: Deploy EHRM/Cerner integrations with IAM – IOC	➤ Q1: Deploy enhancements to support MVI as authoritative source of demographic data	➤ Q1: Deploy enhancements to support MVI as authoritative source of demographic data	➤ Q1: Upgrade MVI matching algorithm	➤ Q1: Deploy MVI TK enhancements to resolve VA person types	
✓ Q2: Integrate SSOi and SSOe login/log-in functionality within Cerner EHR – EHRM IOC	➤ Q2: Deploy EHRM/Cerner account provisioning/de-provisioning in IAM – Wave A	➤ Q1: Deploy EHRM/Cerner integrations with IAM – Wave E	➤ Q2: Deploy MVI TK enhancements to resolve VA person types	➤ Q2: Deploy MVI TK enhancements to resolve VA person types	➤ Q2: Deploy ePACS enhancements – Phase 3	
✓ Q2: Integrate IAM file-based provisioning capability to add and update Cerner users	➤ Q3: Integrate IAM with iFAMS with VBA & NCA	➤ Q1: Integrate IAM with the Physical Access Control System (ePACS)	➤ Q2: Deploy EHRM/Cerner integrations with IAM – Wave I	➤ Q2: Deploy EHRM/Cerner integrations with IAM – Wave J	➤ Q4: Deploy EHRM/Cerner integrations with IAM – Wave K	
✓ Q2: Add the National Provider Identifier as a IAM data element to the user record to support EHRM	➤ Q3: Deploy functionality to store, update, and view person sensitivity levels in IAM	➤ Q1: Deploy capability for the IAM MVI to be the single authoritative source for Social Security number verification	➤ Q2: Deploy ePACS enhancements – Phase 1	➤ Q2: Deploy ePACS enhancements – Phase 2	➤ Q4: Deploy IAM enhancements to support date of death data quality issues	
✓ Q2: Integrate Identity Services that enable EHRM to add patients to Cerner and provide corresponding person identifiers of non-Cerner systems for use in patient care	➤ Q3: Integrate IAM provisioning with VBA Common Security Services	➤ Q2: Deploy MVI messaging infrastructure to support new HL7 FHIR standard	➤ Q3: Deploy IAM enhancements to support date of death data quality issues	➤ Q2: Deploy IAM enhancements to support date of death data quality issues	➤ Q4: Deploy EVVE subscription enhancements	
✓ Q2: Deploy Caregiver ID capability in IAM in support of the MISSION and Patronage Acts	➤ Q3: Deploy EHRM/Cerner account provisioning/de-provisioning in IAM – Wave B	➤ Q2: Deploy MVI TK enhancements to resolve VA person types	➤ Q4: Deploy EVVE subscription enhancements	➤ Q3: Deploy EVVE subscription enhancements	➤ Q4: Deploy IAM enterprise roles	
✓ Q2: Integrate SSOe with VA.gov	➤ Q4: Deploy Electronic Verification of Vital Events (EVVE) subscription in IAM	➤ Q2: Deploy EHRM/Cerner integrations with IAM – Wave F	➤ Q4: Integrate IAM provisioning with Service-Oriented Architecture Research and Development/Maximo	➤ Q4: Complete IAM analysis of enterprise roles		
✓ Q2: Integrate two-factor authentication with legacy VBA applications	➤ Q4: Deploy MVI TK proofing process to support Identity Trait changes	➤ Q3: Upgrade MVI matching algorithm	➤ Q4: Complete integration of enterprise provisioning with 33% of each LoBs' applications	➤ Q4: Complete onboarding for all enterprise user types		
✓ Q2: Deploy functionality to store, update, and view all person types in IAM	➤ Q4: Deploy EHRM/Cerner account provisioning/de-provisioning in IAM – Wave C and D	➤ Q3: Deploy EHRM/Cerner integrations with IAM – Wave G				
✓ Q3: Integrate Login.gov as a credential service provider in IAM		➤ Q4: Deploy EHRM/Cerner integrations with IAM – Wave H				
✓ Q4: Integrate IAM with iFAMS with VHA		➤ Q4: Deploy EVVE subscription enhancements				
✓ Q4: Deploy SSO enhancements to support the Digital Veteran Platform and HealthShare Enterprise Platform		➤ Q4: Deploy non-person entity (service to service) enterprise authentication services				

VISION:
The completion of Cybersecurity and Access Control milestones will enable VA to implement emerging technology, fulfill strategic goals, and mitigate future cybersecurity and identity and access management challenges.

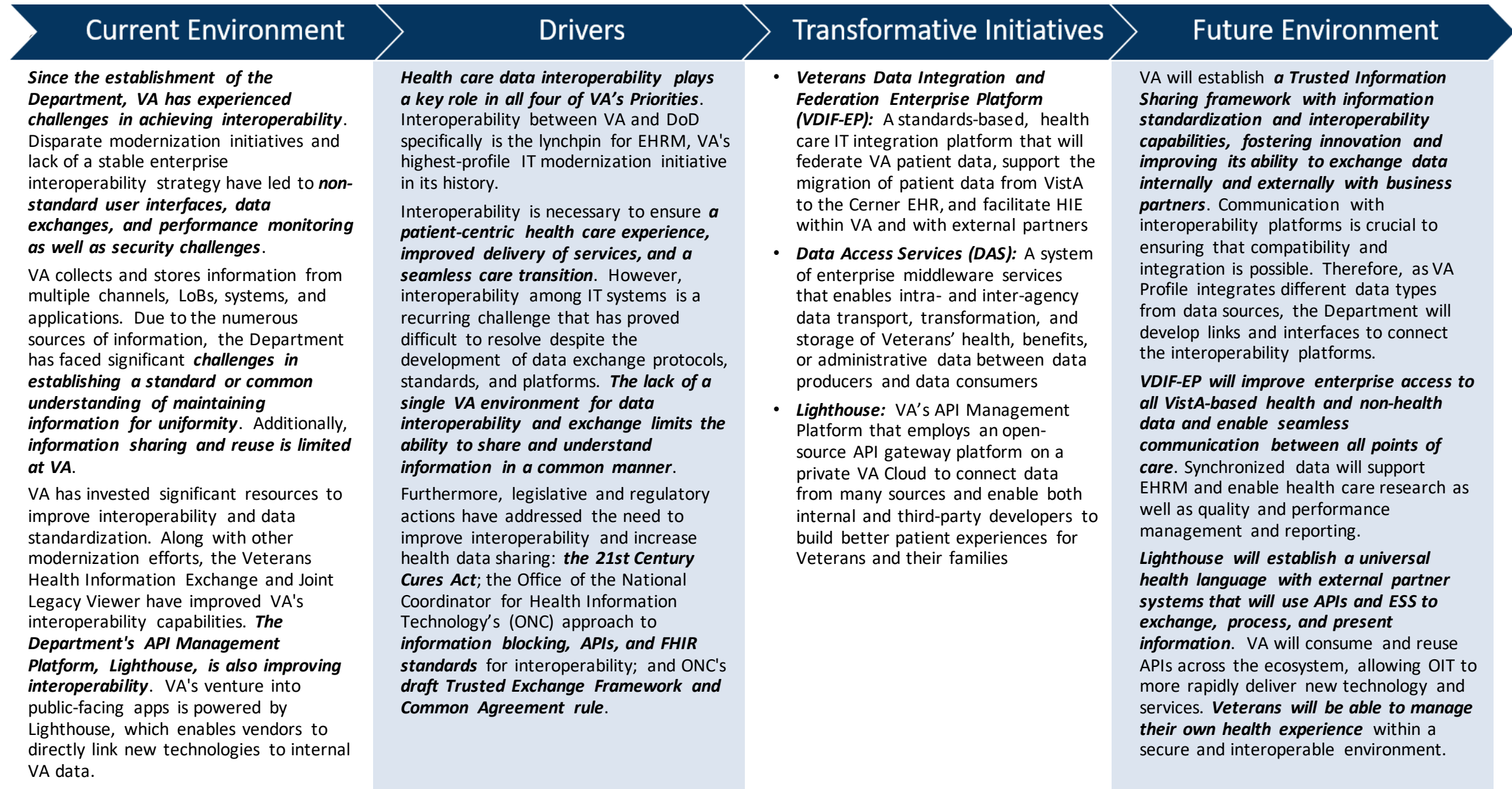


Conceptual Future Environment of IGA Solution





Technology and Platform Services: Trusted Information Sharing





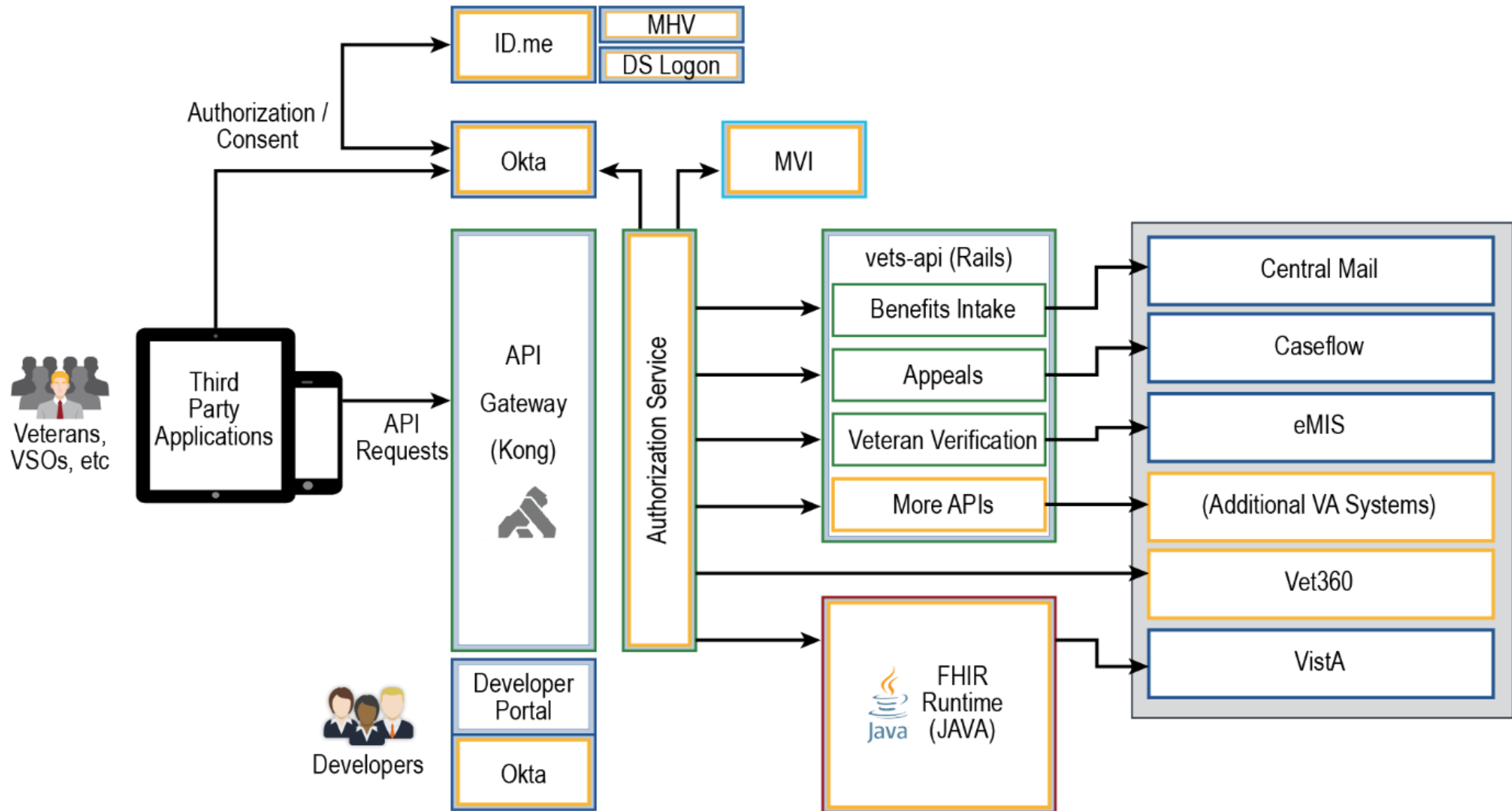
- ✓ Funded
- » Unfunded/
Pre-decisional

* Timelines may shift due to changes in resources and priorities

VISION:
The completion of Trusted Information Sharing milestones will establish an environment of information standardization and interoperability capabilities that fosters innovation and improves internal and external data exchange.

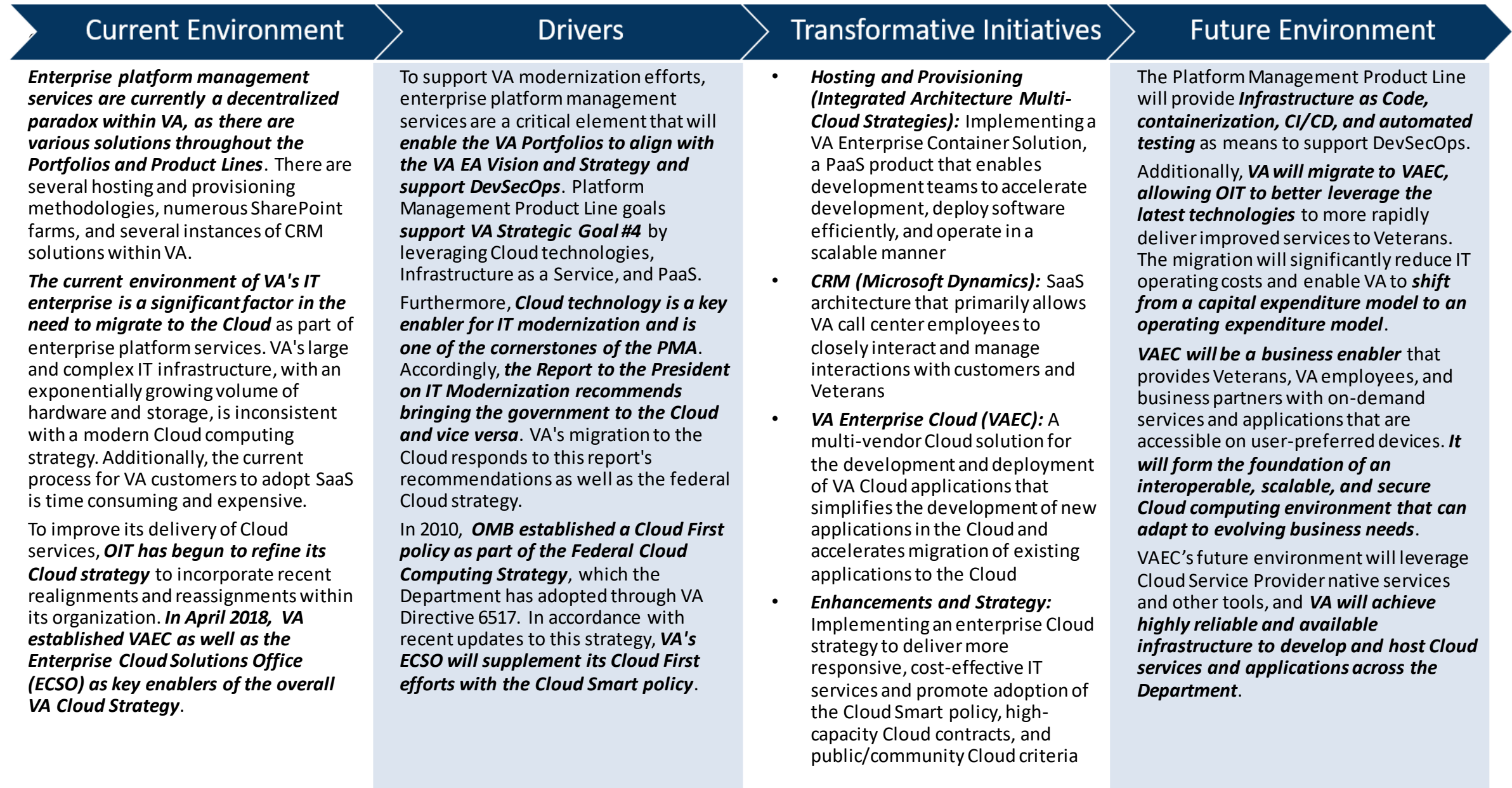


VA's Future Environment of API Architecture





Technology and Platform Services: Platform Management





PLATFORM MANAGEMENT MILESTONES*

F Y 2020 - F Y 2026

✓ Funded
➤ Unfunded/
Pre-decisional

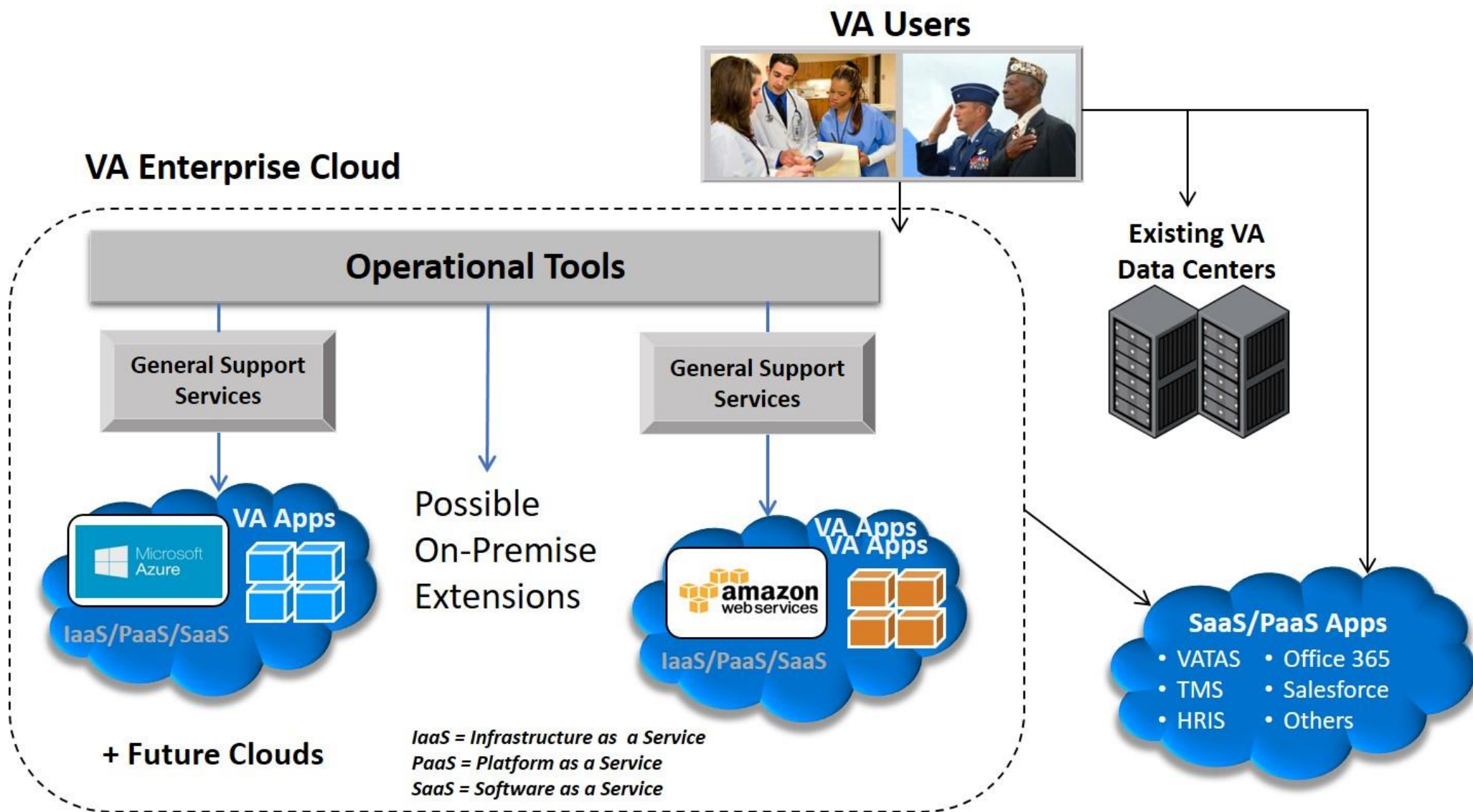
* Timelines may shift due to changes
in resources and priorities

FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
✓ Q1: Complete Hosting & Provisioning (H&P) Container Cloud Pak Pilot	✓ Q1: Review new VAEC computing technology and revise VAEC Strategy	✓ Q1: Review new Cloud technology and evolve VAEC computing strategy	✓ Q1: Review new Cloud technology and evolve VAEC Computing Strategy	✓ Q1: Review new Cloud technology and evolve VAEC computing strategy	✓ Q1: Adapt VAEC to new strategic technology trends	✓ Q1: Adapt VAEC to new strategic technology trends
✓ Q1: Improve VAEC service performance	✓ Q2: Automate VAEC security services	✓ Q3: Improve enterprise Cloud strategy and policies	✓ Q3: Improve enterprise Cloud strategy and policies	✓ Q3: Improve enterprise Cloud strategy and policies	✓ Q2: Evolve strategy and direction based on evolution of VAEC & IT technologies	✓ Q2: Evolve strategy and direction based on evolution of VAEC & IT technologies
✓ Q2: Establish SharePoint (SP) team, review migration plan, and initiate process improvement	✓ Q2: Automate VAEC scanning and testing services	✓ Q3: Complete VAEC automation services in key areas	✓ Q4: Improve VAEC service performance and efficiency	✓ Q3: Expand VAEC to incorporate new Cloud service technology	✓ Q4: Create MSD 365 SaaS CRM SNOW service catalog and automate forms	✓ Q4: Create MSD 365 SaaS CRM SNOW service catalog and automate forms
✓ Q2: Draft MSD 365 CRM transition artifacts, business processes, and implement platform monitoring	✓ Q3: Automate Cloud software development lifecycle	✓ Q4: Improve VAEC service performance and efficiency	✓ Q4: Execute VAEC Migration Plan	✓ Q4: Improve VAEC service performance and efficiency	✓ Q4: Create and implement strategy for innovation and improvements in MSD 365	✓ Q4: Create and implement strategy for innovation and improvements in MSD 365 SaaS Platform
✓ Q2: Select H&P platform to utilize for proof of concept	✓ Q4: Deploy VA-Platform One across VAEC and data centers & implement VA-Platform One Cost Model	✓ Q4: Execute VAEC Migration Plan	✓ Q4: Monitor Azure FedRAMP ATO and hosted customer applications using MSD 365 SaaS	✓ Q4: Complete migration of 350 applications to VAEC	✓ Q4: Plan activities to achieve PLM maturity level 2-5 to align MSD 365 with ACOE strategy and goals	✓ Q4: Plan activities to achieve PLM maturity level 2-5 to align MSD 365 with ACOE strategy and goals
✓ Q2: Continue to review Cloud redundant services used at the local level for enterprise solutions	✓ Q4: Deploy Service catalog item via ServiceNow portal	✓ Q4: Create MSD365 SaaS CRM SNOW service catalog & automate forms	✓ Q4: Plan and develop activities to complete HR required tasks	✓ Q4: Stabilize existing data center operation with VAEC	✓ Q4: Remediate MSD 365 SaaS findings in the CRM AoA Study	✓ Q4: Remediate MSD 365 SaaS findings in the CRM AoA Study
✓ Q3: Update SP strategy and implement process improvements	✓ Q4: Develop and implement VA-Platform One ConOps to support application modernization	✓ Q4: Create and implement strategy for innovation and improvements in MSD 365 SaaS Platform	✓ Q4: Create MSD 365 SaaS CRM SNOW service catalog and automate forms	✓ Q4: Execute VAEC Migration Plan	✓ Q4: Increase MSD 365 SaaS customer base	✓ Q4: Increase MSD 365 SaaS customer base
✓ Q3: Transition MSD 365 CRM platform management responsibility to the Platform Management Product Line	✓ Q4: Conduct container experiments, proof of concept, & market research	✓ Q4: Plan activities to achieve PLM maturity level 2-5 to align MSD 365 with ACOE strategy and goals	✓ Q4: Create and implement strategy for innovation and improvements in MSD 365 SaaS Platform	✓ Q4: Monitor Azure FedRAMP ATO and hosted customer applications using MSD 365 SaaS	✓ Q4: Perform process improvement and optimization	✓ Q4: Perform process improvement and optimization
✓ Q3: Conduct H&P proof of concepts for VA enterprise container solution	✓ Q4: Implement Application Analyzer to support application modernization	✓ Q4: Remediate MSD 365 SaaS findings in CRM AoA Study	✓ Q4: Plan activities to achieve PLM maturity level 2-5 to align MSD 365 with ACOE strategy and goals	✓ Q4: Create MSD 365 SaaS CRM SNOW service catalog and automate forms	VISION: The completion of Platform Management milestones will provide containerization, deliver automated testing as means to support DevSecOps, and enable VA to migrate to VAEC in an effort to leverage the latest technologies and more rapidly deliver improved services to Veterans.	
✓ Q4: Establish SP project to recover hardware cost with Azure farm	✓ Q4: Develop Service Offerings for Hosting in the IO Franchise Fund	✓ Q4: Improve Data Management Interface processes and procedures	✓ Q4: Remediate MSD 365 SaaS findings in the CRM AoA Study	✓ Q4: Create and implement strategy for innovation and improvements in MSD 365 SaaS Platform		
✓ Q4: Manage all new MSD 365 CRM customer requests for licenses and platform provisioning	✓ Q4: Establish SP guidelines and best practices & provide SP Platform Solutioning services	✓ Q4: Develop Service Offerings for Hosting in the IO Franchise Fund	✓ Q4: Develop Service Offerings for Hosting in the IO Franchise Fund	✓ Q4: Plan activities to achieve PLM maturity level 2-5 to align MSD 365 with ACOE strategy and goals		
✓ Q4: Migrate VistA instances and disaster recovery capabilities to VAEC	✓ Q4: Develop SPOL Training pathways & enhance the SPOL Support Model	✓ Q4: Perform process improvement and optimization	✓ Q4: Engage stakeholders for Hosting Services	✓ Q4: Remediate MSD 365 SaaS findings in the CRM AoA Study		

As of March 31, 2020



VAEC Future Environment Architecture



OIT Transformation

OIT recognizes that in order to enable VA modernization, the organization must transform. By doing so, OIT will help VA become an organization that Veterans and VA employees want to interact with and rely on. The following are foundational elements of OIT Transformation.

Product Line Management



Product Line Management (PLM) is an operating model that aligns IT resources and funding to business capabilities to deliver specific business outcomes. OIT leadership established the PLM Working Group to evaluate the benefits of adopting a PLM model. Following the success of a Digital Experience Pilot, OIT is adopting PLM across the organization. OIT's current PLM Operating Model includes five Portfolios, 27 Product Lines, and 700+ products (systems/applications).

Technology Business Management



Technology Business Management (TBM) is a value-management framework for IT organizations predicated on transparency of cost, consumption, and performance. The TBM framework characteristics are based on continuous improvement and positioning for value. Following TBM's success in the commercial space, OMB recommended that the public sector adopt the TBM framework across the Federal Government in 2017. By FY 2022, VA will meet the OMB mandate to fully report all IT Towers and Cost Pools in the TBM taxonomy, and OIT will operate at TBM Maturity Level 5 (Business Driver).

DevSecOps



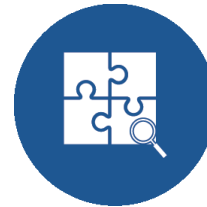
Development Security Operations (DevSecOps) is a product team level development paradigm that implements an industry-standard "continuous delivery pipeline," producing frequent and regular product releases. DevSecOps integrates requirements definition, development, security testing, operations, compliance, and the customer into one product team. These product teams, using DevSecOps practices, are the basic organization unit for Product Lines and manage releases, and production operations.

Enterprise Data Management



Enterprise Data Management (EDM) is the holistic development and execution of data management plans that deliver the value of VA data. VA's data is a fundamental resource of the Department, and the effective management of its data is integral to the delivery of services to Veterans. OIT will institutionalize EDM as part of governance through the provision of the Enterprise Logical Data Model and Data Governance Council approved data standards.

Strategic Sourcing



OIT established the Office of Strategic Sourcing (OSS) to provide more accountable IT product and service procurement for VA. OSS's work encompasses the entire sourcing lifecycle and is transforming OIT to be a customer of choice to suppliers, thereby attracting the best talent and the price. OSS enables OIT to maximize value by optimizing the stewardship of tax dollars and will implement a category management capability that enables VA to deliver more value and savings from its IT acquisitions.

IT Governance



IT governance provides critical support for the enterprise-level IT governance that enables efficient investment/portfolio management necessary for transformation and continuous process improvement across VA. It also supports implementation of regulations and guidance from internal and external government-wide advisory bodies. IT governance focuses on effective and efficient decision making and will help support planning as a part of the PPBE process, UFR validation, FITARA compliance, and TBM implementation.

Next Steps

- Publish the comprehensive FY 2020–2026 VA Enterprise Roadmap aligned to VA's IT Strategy
- Publish the FY 2020–2026 VA Enterprise Roadmap Executive Summary
- Introduce the Enterprise Roadmap to OIT Governance Boards to review the major components and drive meaningful and strategic IT management governance decisions
- Inform long-term IT planning, prioritization activities, and unfunded requirement (UFR) review
- Collaborate with OSS and IT Resource Management (ITRM) to gather data on reinvestment strategies, cost savings, and cost avoidance
- Define and establish scope for target VA Enterprise, Portfolio, and Product Architecture
- Update the Enterprise Roadmap on an annual basis
- Identify programmatic, portfolio, integration, and schedule overrun risks by working with QPR's Risk Management Division

Acronyms and Abbreviations (A–GC)

Acronym	Description
.govCAR	.gov Cybersecurity Architecture Review Program
21st Century IDEA	21st Century Integrated Digital Experience Act
ACOE	Agile Center of Excellence
ACTIV	Advanced Computational and Translational Initiatives for Veterans
ADS	Authoritative Data Source
AI	Artificial Intelligence
ALS	Adobe Learning Suite
AMA	Veterans Appeals Improvement and Modernization Act of 2017
AMAS	Automated Monument Application System
Amazon S3	Amazon Simple Storage Service
AMS	Appraisal Management Service
AoA	Analysis of Alternatives
API	Application Programming Interface
AQS	Analytical Quality System
ARMS	Appeals Resource Management System
ARS	Attachment Retrieval System
ATA	Anywhere to Anywhere
ATLAS	Advancing Telehealth through Local Access Stations
AVM	Automated Valuation Model
AWS	Amazon Web Services
B2C	Bill to Collect
BEP	Benefits Enterprise Platform
BF2E	Budget Formulation to Execution
BFFS	Beneficiary Fiduciary Field System
BGS	Benefits Gateway Services
BIA	Benefits Integration and Administration
BIP	Benefits Integration Platform

Acronym	Description
BIRLS	Beneficiary Identification and Record Locator Subsystem
Board	Board of Veterans' Appeals
BOSS	Burial Operation Support System
BOSS-E	Burial Operation Support System – Enterprise
C&P	Compensation and Pension
CAP	Cross-Agency Priority
CARMA	Caregiver Record Management Application
CCM	Case and Correspondence Management
CCN	Community Care Network
CCP	Community Care Program
CCRA	Community Care Referral and Authorization
CCRS	Community Care Reimbursement System
CD2	Critical Decision 2
CDM	Continuous Diagnostics and Mitigation
CDS	Courseware Delivery System
CDW	Corporate Data Warehouse
CFM	Office of Construction & Facilities Management
CHAMPION	Computational Health Analytics for Medical Precision to Improve Outcomes Now
CHDR	Clinical Data Repository/Health Data Repository
CI/CD	Continuous Integration and Continuous Delivery
CIO	Chief Information Officer
CLE	Continuing Legal Education
CommCare C3	Community Care Clinical Contact Center
ConOps	Concept of Operations
COTS	Commercial Off-the-Shelf
COVERS	Control of Veterans Records System
CP4	Checkpoint 4
CPAC	Consolidated Patient Account Center

Acronym	Description
CPRS	Computerized Patient Record System
CRM	Customer Relationship Management
CS	Compensation Service
CSS	Centralized Scheduling Solution
CTI	Computer-Telephony Integration
CWINRS	Corporate Waco-Indianapolis-Newark-Roanoke-Seattle
CX	Customer Experience
CxDW	Customer Experience Data Warehouse
DAS	Data Access Services
DATA Act	Digital Accountability and Transparency Act of 2014
DBS	Daily Burial Schedule
DCCI	Data Center Consolidation Initiative
DCOI	Data Center Optimization Initiative
DD/EFT	Direct Deposit/Electronic Funds Transfer
DevSecOps	Development Security Operations
DHS	U.S. Department of Homeland Security
DLP	Data Loss Prevention
DMLSS	Defense Medical Logistics Standard Support
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
EA	Enterprise Architecture
EAAS	Emergency Alerting and Accountability System
ECCM	Enterprise Contact Center Modernization
eCMS	Electronic Contract Management System
ECSC	Enterprise Call Session Control
ECSS	Enterprise Cloud Solutions Office
ECSP	Enterprise Cybersecurity Program
ECSS	Enterprise Cybersecurity Strategy
EDI	Electronic Data Interchange
EDIS	Emergency Department Integration Software

Acronym	Description
EDM	Enterprise Data Management
EDU	Education Service
EHR	Electronic Health Record
EHRM	Electronic Health Record Modernization
eHX	eHealth Exchange
EIN	Electronic Insurance
ePACS	Physical Access Control System
EPRS	Enterprise Program Reporting System
ERM	Enterprise Risk Management
ES	Enrollment System
ESM	Enrollment System Modernization
ESS	Enterprise Shared Service
e-VA	Electronic Virtual Assistant
EVVE	Electronic Verification of Vital Events
FAR	Federal Acquisition Regulation
FAS	Finance and Accounting System
FCCPAC	Florida/Caribbean Consolidated Patient Account Center
FEBP Act	Foundations for Evidence-Based Policymaking Act of 2018
FedRAMP	Federal Risk and Authorization Management Program
FEMA	Federal Emergency Management Agency
FFLR	Full File Loan Review
FHIR	Fast Healthcare Interoperability Resources
FISMA	Federal Information Security Management Act
FITARA	Federal Information Technology Acquisition Reform Act
FMBT	Financial Management Business Transformation
FMS	Financial Management System
FOC	Full Operating Capability
FOM	Functional Organizational Manual

Acronyms and Abbreviations (GE–TE)

Acronym	Description
FP	First Party
FRCP	Federal Rules of Civil Procedure
FSC	Financial Services Center
FSSP	Federal Shared Service Provider
FTI	Federal Tax Information
FY	Fiscal Year
GAO	U.S. Government Accountability Office
GAR	Gravesite Assessment Reporting
GCLAWS	General Counsel Legal Automation Workload System
GenISIS	Genomic Information System for Integrated Science
GIS	Geographic Information System
GOE	General Operating Expense
GOTS	Government Off-The-Shelf
GS	General Schedule
GSA	U.S. General Services Administration
H&P	Hosting & Provisioning
HCBRM	Human Capital Business Reference Model
HEC	Health Eligibility Center
HIE	Health Information Exchange
HIPAA	Health Insurance Portability and Accountability Act
HR	Human Resources
HR&A	Office of Human Resources and Administration
HR-PAS	Human Resources Payroll & Accounting Services
HRC	Health Resource Center
HRIS	Human Resources Information System
HRIT	Human Resources Information Technology
HSRM	HealthShare Referral Manager
IAM	Identity and Access Management

Acronym	Description
IC3	Interagency Care Coordination Committee
IDT	Interactive Design Template
iFAMS	Integrated Financial and Acquisition Management System
IGA	Identity Governance and Administration
IHP	Informal Hearing Presentation
INS	Insurance Service
IOC	Initial Operating Capability
IoT	Internet of Things
IPS	Insurance Payment System
IRB	Institutional Review Board
IRM	Information Resources Management
IRS	Internal Revenue Service
ISCM	Information Security Continuous Monitoring
IST	Integrated System Testing
IT	Information Technology
ITRM	IT Resource Management
IVR	Interactive Voice Response
JALFHCC	Captain James A. Lovell Federal Health Care Center
JSRRC	Joint Services Records Research Center
KM	Knowledge Management
LAN	Local Area Network
LGY	Loan Guaranty Service
LIP	Licensed Independent Practitioners
LIPAS	Life Insurance Policy Administration Solution
LoB	Line of Business
MACPAC	Mid-Atlantic Consolidated Patient Account Center
MADSS	Management and Decision Support System
MAP-D	Modern Award Processing Development
MBMS	Memorial Benefits Management System

Acronym	Description
MHA	Mental Health Assistant
MISSION	Maintaining Internal Systems and Strengthening Integrated Outside Networks
ML	Machine Learning
MPI	Master Person Index
MPI-e	Master Person Index – Enhanced
MSCPAC	Mid-South Consolidated Patient Account Center
MSD 365	Microsoft Dynamics 365
MSDS	Military Service Data Sharing
MSS	Manager Self-Service
MVI	Master Veteran Index
MVP	Million Veteran Program
MYP	Multi-Year Plan
NARA	National Archives and Records Administration
NCA	National Cemetery Administration
NCCPAC	North Central Consolidated Patient Account Center
NCC	National Call Centers
NECPAC	North-East Consolidated Patient Account Center
NextGen PIV	Next Generation Personal Identity Verification
NGL	Nationwide Gravesite Locator
NPL	Non-Performing Loan
NWQ	National Work Queue
OALC	Office of Acquisition, Logistics, and Construction
OCLA	Office of Congressional and Legislative Affairs
OCM	Organizational Change Management
ODM	Operational Decision Manager
OGC	Office of the General Counsel
OIG	Office of Inspector General
OIS	Office of Information Security

Acronym	Description
OIT	Office of Information and Technology
OMB	Office of Management and Budget
ONC	Office of the National Coordinator for Health Information Technology
OPIA	Office of Public and Intergovernmental Affairs
ORD	Office of Research and Development
ORM	Office of Resolution Management
OSP	Office of Operations, Security, and Preparedness
OSS	Office of Strategic Sourcing
OTH	Other-Than-Honorable
P&F	Pension and Fiduciary Service
P2P	Procure to Pay
PaaS	Platform as a Service
PAID	Personnel and Accounting Integrated Data
PATS-R	Patient Advocate Tracking System - Replacement
PCGL	Personal Computer Generated Letters
PCMM	Primary Care Management Module
PDMP	Prescription Drug Monitoring Program
PIV	Personal Identity Verification
PLM	Product Line Management
PMA	President's Management Agenda
PPBE	Planning, Programming, Budgeting, and Execution
PPMS	Provider Profile Management System
QPR	Office of Quality, Performance, and Risk
R2R	Record to Report
RA	Reimbursable Agreement
REACH VET	Recovery Engagement And Coordination for Health – Veterans Enhanced Treatment
REE	Registration Eligibility and Enrollment
RLC	Regional Loan Center

Acronyms and Abbreviations (TI-X)

Acronym	Description
RLS	Regional Local Service
RPA	Robotic Process Automation
RTM	Requirements Traceability Matrix
SaaS	Software as a Service
SCLA	SecVA/Congressional/Legal Affairs
SCMC	Supply Chain Master Catalog
SDVI	Service-Disabled Veterans Life Insurance
SDVOB	Service-Disabled Veteran-Owned Business
SecVA	Secretary of Veterans Affairs
SIO	Systems Integration Office
SP	SharePoint
SPOL	SharePoint Online
SQUARES	Status Query and Response Exchange System
SSO	Single Sign-On
SSOe	Single Sign-On External
SSOi	Single Sign-On Internal
SWIMS	Enterprise Safety/Workers' Compensation Information Management System
TAC	Technology Acquisition Center
TBM	Technology Business Management
TED	Office of Transition and Economic Development
TIC	Trusted Internet Connection
TK	Toolkit
TMP	Telehealth Management Platform
UAT	User Acceptance Testing
UD-O	Unified Desktop Optimization
UFR	Unfunded Requirement
UoC	University of Chicago
USDA	U.S. Department of Agriculture
VA	U.S. Department of Veteran Affairs
VACOLS	Veterans Appeals Control and Locator System

Acronym	Description
VADIR	VA/DoD Identity Repository
VAEC	VA Enterprise Cloud
VALERI	VA Loan Electronic Reporting Interface
VALERI-R	VA Loan Electronic Reporting Interface Re-Design
VAM	Voice Access Modernization
VAMC	VA Medical Center
VAOS	VA Online Scheduling
VASS	VA Solid Start
VBA	Veterans Benefits Administration
VBMS	Veterans Benefits Management System
VDIF	Veterans Data Integration and Federation
VDIF-EP	Veterans Data Integration and Federation Enterprise Platform
VEMS	Veterans Enterprise Management System
VEO	Veterans Experience Office
VETS Act	Veterans E-Health and Telemedicine Support Act of 2017
VETSNET	Veterans Service Network
VHA	Veterans Health Administration
VICTARS	Veterans Insurance Claims Tracking and Response System
VINCI	VA Informatics and Computing Infrastructure
VIP	Veteran-focused Integration Process
VIS	Veterans Information Solution
VISN	Veterans Integrated Service Network
VistA	Veterans Information Systems and Technology Architecture
VLM	Veterans Legacy Memorial
VMLI	Veterans' Mortgage Life Insurance
VOSB	Veteran-Owned Small Business
VPC	Virtual Private Cloud
VPN	Virtual Private Network

Acronym	Description
VR&E	Veteran Readiness and Employment
VRM	Veterans Relationship Management System
VSE	VistA Scheduling Enhancement
VSignals	Veterans Signals
VSO	Veterans Service Organization
VVA	Virtual VA
VVC	VA Video Connect
WAN	Wide Area Network
WHHL	White House VA Hotline
WITS	Washington Interagency Telecommunications System
WOC	Without Compensation
xAPI	Experience API